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The Common Destiny of the Americas

by John C. Dreier
U.S. Representative to the Council of the Organization of American States[1]

It is particularly suitable that the Miami celebration of Columbus Day pay special attention to the common bond which the United States shares with the peoples of the other American Republics on this "birthday" of our continent.

San Salvador, or Watlings Island—the first piece of land touched by the discoverer early in the moonlit morning hours of October 12, 1492—lies some 400 miles to the southeast of here. Had it not been for a flock of birds, Columbus' course might have led him ultimately to the shores of Florida. We might then be celebrating this evening on the spot which the Admiral of the Ocean Seas had touched himself.

A few days before the discovery—up to October 7, to be exact—Columbus was following a westward course, which in fact aimed almost directly at Miami. The records tell us that on that date he saw a great flight of birds heading toward the southwest—no doubt one of the great annual fall migrations with which we are familiar today. Columbus shifted his course halfway to the southwest on the theory that the birds must be headed for land. If he had not done so, at least one historian who is also a mariner of note maintains, Columbus would probably have passed through the northern Bahamas, entered the Gulf Stream, and been carried up the Florida east coast.

Had Columbus' powerful imagination and vision extended to a comprehension of the charms of this part of the world, I am sure he would have disregarded the sign of the flying birds. However, as thankful citizens of this New World, we may forgive this lapse in his otherwise masterful genius and celebrate his coming as though he had in fact set foot on these golden shores.

This little incident of the birds and its possible effect upon history is not only an amusing tale. It seems to me also to represent the many vagaries, uncertainties, errors, arguments, and difficulties with which Columbus and his venture were surrounded.

Over the years, as he sailed the seas of the eastern Atlantic and studied the calculations of the leading geographers of his own time and of centuries past, Columbus formulated a great plan which he called the "Enterprise of the Indies." Popular belief to the contrary, educated men in Columbus' day recognized that the world was round. But, while to others this was largely a matter for academic discussion, to Columbus it became a challenge to action. Why not take advantage of this fact, he argued, and sail across the sea to the other side of the world where inevitably one would come upon Cipangu (Japan) and the territories of the Great Khan? Thus would be opened up a new trade route to the riches of the Indies, as the whole of Asia was at that time called. And in the process of sailing this hitherto unknown portion of the sea, who knows, he asked, whether one might not encounter an island or two which would make a convenient stopping place before the Indies were reached, and of which one would, of course, become the royal governor?

Like many another man with a project to put over, Columbus first had to overcome the experts. For years the eminent scholars whose advice was sought by the Spanish crown declared that the Enterprise of the Indies was impractical and based upon false calculations. And the strange thing

[1] Address made before the Miami Citizens Committee for the Inter-American Observance of Columbus Day, at Miami, Fla., on Oct. 11 (press release 565).

about it is that they apparently were right—or at least less incorrect than Columbus. They declared his idea of a narrow sea between Spain and China or Japan was an underestimation; that the ocean was really much greater than Columbus figured; and that the opposite shore was beyond the range of contemporary sailing vessels. Little did they know how right they were—but, of course, what neither they nor Columbus suspected was that America lay on the way.

Columbus finally appeared to have won the acquiescence if not the support of the experts and then had to wrestle with politics. After years of waiting, much of it spent in conditions of great poverty, he received his hearing before Queen Isabella and was turned down. Then there intervened one of those turns of fate of which we have no explainable cause. On his way from the Spanish court toward France, where he hoped to receive a better response, he was overtaken and ordered back. The Queen had changed her mind and determined to set the Enterprise of the Indies afloat.

Then, the ships made ready, came the voyage itself. Farther west sailed the caravels than any man had ever sailed before; mythical islands appeared and disappeared as false landfalls were made. Having gone far beyond his estimated distance, Columbus himself believed he had missed Japan.

Then came the increasing impatience of the men cooped up on these tiny vessels—more false landfalls—the command "Adelante—sail on"—the final promise to turn back in three days more if no land were sighted; and that night the glimpse of a light (was it real, or merely the last false illusion of success?) and then at 2:00 a. m. on October 12 the cry of "tierra! tierra!," when not a new route to Asia but a New World came into being.

Through all these incidents reflecting the limitations of human mind and body there emerges as the responsible factor of success the great personality and character of Columbus. Fired with a vision, deep in the faith that he would succeed, his inspired pursuit of a grandly conceived, though not entirely accurate, goal led to a triumphant and world-shaking reality.

And so today we celebrate the 462d anniversary of the discovery. We honor Columbus, the man, whose faith and courage brought into being a New World and whose personal triumph provided a bridge from the dying Middle Ages to the new era of hope, discovery, and enlightenment which followed thereafter.

The discovery is, of course, the first great historical fact which all the peoples of North and South America share in common. Through it, all of America is linked to the motherland of Western Europe and its civilization.

Following Columbus, as decades and centuries passed, a great wave of population moved in increasing numbers across the Atlantic. Like Columbus himself, the settlers of America were motivated by a number of different impulses—religious faith and ambition for material gain being prominent among them. But of increasing importance to those who came to the New World was a desire for freedom to work out a way of life of their own choosing.

Continental Unity

Thus, after some three centuries of colonization, America began to become conscious of a character of its own. Whereas it had been—except for conquered native populations—dependent upon Europe culturally, economically, and politically, by the end of the 18th and early 19th centuries America became conscious of its differences from Europe. This sense of difference was soon translated into political independence.

The second great historical bond that unites the Americas is, therefore, the achievement of their independence. Through this act the European settlements of colonial times became in fact the New World of modern times.

The consciousness of a common destiny as nations of a New World has been for 150 years one of the main ingredients of the mortar which has bound our countries together. Americans of all nations have shared the opportunity which the New World has been given to get rid of the rivalries and enmities which had led European countries to repeated warfare and to establish on this continent a community of nations that could live in peaceful cooperation with each other.

Americans, North and South, have sought their destiny in creating a society of free men, based upon the recognition of the dignity and worth of the individual human being, casting off the rigid class distinctions and hampering traditions which characterized Old World society. A richer life,

measured not only in material but in cultural and spiritual terms, became the goal which Americans have by common consent set themselves to achieve.

It was this spirit of Americanism which led to the gradual development of what we have called the inter-American system and its instrument, the Organization of American States. It was a sense of relationship with Latin America, as part of a greater America, that led to the adoption of the Monroe Doctrine in 1823. A similar continental concept inspired the ambitions of the great liberators of Latin America. Simon Bolívar, when he called a conference in Panama in 1826, envisaged a federation of Latin American countries as a step toward a united continent including the United States.

Again in 1889 it was a sense of continental unity which led the Government of the United States to call the first Pan American Conference, thus setting in motion the uninterrupted series of conferences which form the main consultative body of the Organization of American States, the tenth of which was held this year in Caracas, Venezuela.

When the Ninth Inter-American Conference met in Bogotá in 1948 to draft a new constitutional document, the representatives of the 21 Republics set forth the purposes and principles of the Organization. These purposes may be summarized under two main headings: first, the maintenance of the peace and security of the Americas to prevent aggression from any source and protect the freedom and sovereignty of every member state; and second, cooperation in working out common problems in order to promote the economic, social, and cultural welfare of all peoples of these 21 countries.

"Enterprise of the Americas"

Paraphrasing Columbus' original proposal, we may call this common effort of American nations the "Enterprise of the Americas."

We can point with pride to past achievements in regard to both the great purposes to which our enterprise is dedicated. But, like the Enterprise of the Indies, our Enterprise of the Americas has encountered many difficulties and still faces problems of a future not yet clear.

In the field of peace and security we can take justifiable pride in the growing sense of mutual responsibility that has developed over the past 100 years. When the United States issued the Monroe Doctrine in 1823, we expressed our unilateral concern over any possible efforts to reestablish colonies or to reintroduce European political systems on this continent. By the early part of this century we had declared our intention to act in situations where intervention by a non-American power in the affairs of other American countries was threatened in order to forestall such intervention. But gradually this assumption by one country of a unilateral responsibility for the maintenance of peace and security was converted into an assumption by all 21 countries of a common responsibility. This great development was reflected in the principle adopted at the Conference of Chapultepec in Mexico in 1945, that an attack against one American State would be considered an attack against all.

This principle was incorporated in the Treaty of Rio de Janeiro, which provides for mutual assistance among the American States in the event of an armed attack and consultation in regard to any other form of aggression. The success of the regional machinery established in the Treaty of Rio de Janeiro for the prevention of aggression has been demonstrated on more than one occasion. As a companion piece to this treaty, there has also been drafted another agreement setting forth methods for the peaceful solution of international disputes among the American States. Although this second treaty has not yet reached the point of approval by a majority of the American Republics, consideration is now being given to the desirability of revising the treaty to remove some of the obstacles which have impeded ratification. In any event the principles, procedures, and practice of peaceful settlement are so firmly established among the American States that they constitute one of the basic assumptions of our international code of conduct.

Yet we cannot by any means view with complete equanimity the present situation in this continent with respect to the maintenance of peace and security. For the main danger which America faces today is, as dangers so often are, of a new sort—the danger of aggression by subversion of political institutions in the interests of a foreign power. We have a new kind of foe to cope with, and new and more effective means of defense must be found.

Caracas Conference

An important beginning to devise a stronger system of peace and security in the face of this

danger was made at the Caracas Conference held last March. There, interpreting the principle of unity in defense against aggression, the American States declared that the domination or control of political institutions of an American State by the international Communist movement, extending to this hemisphere the political system of an extracontinental power, would constitute a threat to the sovereignty and political independence of the American States, endangering the peace of the Americas, and would call for a Meeting of Consultation to consider appropriate action.[2] It was on the basis of this principle that the American States last June, following some sensational developments in the Republic of Guatemala, called for a Meeting of Consultation to consider the situation created by Communist infiltration in that country. The Foreign Ministers were about to meet when a successful revolution in Guatemala overthrew the Communist-penetrated government there.

The outcome of the Guatemalan case should not, however, lead us to think either that the general problem has been eliminated from the Americas or that the means of protecting American political institutions have been clearly developed. More constructive thought is needed to understand the nature of the Communist threat to America and methods whereby unity of America may be evoked in defense against it. Certainly vigilance and a readiness to expose and control subversive activities are required. The role of international organizations in this respect must be more clearly thought out.

Moreover, no one viewing the tradition of America can feel satisfied with negative measures alone. If we wish to strengthen our continent against the violence and bloodshed which in recent years have brought misery and subjection to other parts of the world, we must build in the hearts of men. And that requires the clarification and dramatization of positive American goals that will respond to the political, economic, and cultural aspirations of the peoples of America. No program for the security of our American nations can succeed unless the peoples of America are given at least a moderate assurance that through inter-American unity and cooperation, constructive and positive gains will be made in improving the life of the common man.

[2] Bulletin of Apr. 26, 1954, p. 638.

That brings us to the other great purpose of our Enterprise of the Americas—the promotion of the economic, social, and cultural welfare of our people. Here too we may point with pride to important developments in which the cooperation of American peoples has played a vital role.

Our trade relations reflect the growing unity in inter-American affairs. United States trade with Latin America has increased from $1.7 billion in 1938 to almost $7 billion in 1952. Today Latin America provides about one-third of our total imports and takes from a fourth to a fifth of our exports. Latin American countries increasingly look to the United States as a market for their raw materials and as a source of manufactured goods and capital equipment. The Latin American area is the largest single area of United States foreign investments.

Moreover, progress in economic and social lines in Latin America has been outstanding, showing rates of growth which compare favorably with economically more advanced areas.

For this progress, inter-American cooperation may take a considerable share of the credit. The program of reciprocal trade agreements, whereby since the 1930's tariffs have been reduced as a measure of promoting international trade, has been of great benefit to inter-American trade. Private investments which have formed the basis of most economic development in Latin America have been supplemented by special intergovernmental arrangements. Through the Export-Import Bank and the International Bank for Reconstruction and Development, loans to Latin America since World War II have been made at a rate of about $100 million per year. The fact that these loans have been made for sound economic projects is evidenced by the satisfactory rate of repayment.

Technical Assistance Program

Finally, a remarkable and interesting technical assistance program has been developed among the American Republics which is contributing to the economic and social development of the entire area. In the fields of agriculture, health and sanitation, education, and housing, a wide interchange of technical knowledge is being promoted. Projects are being undertaken to apply this technical know-how to the solution of specific problems in individual countries. These activities are being

carried out not only through bilateral arrangements between the United States and other American countries but also through the agency of the Organization of American States.

For example, the Pan American Sanitary Bureau, the oldest international health organization in the world, is carrying on a continent-wide campaign to exterminate the carrier of yellow fever in settled areas, as well as conducting a number of other dramatic and significant health programs in cooperation with national health agencies. The Inter-American Institute of Agricultural Sciences is developing basic scientific and sociological information which can increasingly contribute to the improvement of problems of agriculture and rural life throughout Central and South America.

Thus again we may point with pride to achievement in this field, and yet at the same time we must also look ahead to the existence of great and unsolved problems which challenge the future of inter-American unity and cooperation. For great as is the progress in social and economic fields in Latin America, the demand for progress is increasing at an equal if not a faster rate. When people can see, as a result of motion pictures, travel, and other media of mass information, the higher standards of living to which modern technology gives access, they become impatient to get there. The long, slow process through which our own country went in the 19th century no longer satisfies the urgent demands of peoples who are just now starting that long climb to a better way of life.

Moreover, as modern technology has altered the economic basis of life, taking people away from the traditional rural society and developing the proletarian life of the cities, people have become more dependent upon the course of worldwide economic events. The outbreak of fighting in Korea, for example, had an immediate and direct effect upon the life of the Indian miner on the Bolivian Altiplano. The suddenly increased demand for tin sent prices skyrocketing. Then, a few years later, the demand fell, and down crashed prices too, thus knocking to pieces the inflated economic structure which had been created 2 or 3 years before.

It is no wonder that a principal goal which the Latin American countries are now seeking in the field of economic relations is for a greater stability in their trade with us—particularly in their ability to sell their copper, tin, coffee, petroleum, and other essential goods to us at what they would consider a fair rate of return.

This is but one example illustrating the fact that now more than ever the basic problems of this continent require international solutions. By this I do not in any way mean to disregard the equally powerful fact that international cooperation can help only those nations that begin by doing all within their power to help themselves.

The ultimate fact, underlining the need for international action in regard to these problems that so directly affect human life in this continent, is that a failure to solve them cannot avoid international repercussions. If the people of any American country is delivered into the hands of destructive demagogues and extremists, we shall all be the losers. If either communism on the one hand or fanatic nationalism on the other—or the two working together—should ever capture any considerable portion of the population of this continent, the possibility of our ever achieving the high purposes of inter-American cooperation would indeed be dim. For in this age of explosive forces we can hope to maintain our freedom and civilization only if rational courses of human conduct win out. All of us—North Americans and Latin Americans—have a stake, therefore, in making our Enterprise of the Americas work. This means enlarging the area of common thought and effort towards achieving on this continent a greater measure of freedom, security, and well-being.

Belief in the Future

With respect to all the problems which face us in inter-American cooperation today, perhaps what is needed as much as anything is a rededication to that great American spirit which came into being 150 years ago with the achievement of independence and which inspired men to a faith in their destiny as inhabitants of a new world endowed with a new hope.

For a century and a half we have gone forward with a firm belief in our future and in our capacity to create in this New World a better life for humanity. Great things have been done. A great deal remains to be done if we want to have on this continent a strong, united, and confident America. There are too many signs today that that great belief in our future has been shaken, and that con-

fidence in ourselves and in our fellow Americans has been soured with suspicion. Fear and hatred have made inroads where courage and good will should prevail.

Too often we hear it suggested that we have gone as far as we can go in international cooperation; that we should even turn back from our efforts to seek a greater unity among nations. Perhaps, after all, our Enterprise of the Americas is just another crackpot idea.

Surely we cannot lend ourselves to such counsels. They reflect the same atmosphere of cynicism and doubt that characterized the end of the 15th century when Columbus formulated his Enterprise of the Indies. It is refreshing to recall that among various other negative arguments advanced by the most learned scholars of that time, in response to Columbus' proposals, was the observation that in that advanced era of civilization, so long after the creation of the world, it was unlikely that there were anywhere any more lands of any value to be discovered!

Two years later, driven by his inspired faith and determination, Columbus came upon a New World.

As we, the beneficiaries of his greatness, look forward to the possibilities of building a stronger and more vigorous America, let us recall as most applicable to our own times the words of Columbus in his letter reporting the discovery: "The eternal Almighty God, our Lord, it is Who gives to all who walk in His way victory over things apparently impossible."

Some Aspects of the Present Economic Situation in Latin America

by Edward G. Cale
Director, Office of Regional American Affairs [1]

I come to speak to you on the subject of some aspects of the present economic situation in Latin America with a very great appreciation of the complexity of the subject matter and of my own limitations for dealing with them.

In fact, it is difficult and sometimes erroneous to think in terms of Latin America as a unit, since there is great diversity among the countries of this area, which occupies almost one-fifth of the world's land area. For example, the countries vary greatly in size, ranging from Brazil, which is about as large as the United States plus an additional Texas, to Haiti, which is about the size of the State of Maryland. Differences in race between the various countries are also often very marked. In some countries, such as Mexico, Guatemala, Peru, and Bolivia, Indian blood predominates; in others, such as Argentina and Uruguay, the population is largely of European origin. In certain regions, such as northeastern Brazil and the coastal fringes of the Caribbean, considerable Negro blood is to be found. There are also great differences between many of the countries, economically. For example, there are many ways in which economic conditions in such countries as Argentina, Chile, and Cuba are more nearly like those in the United States than those in such other Latin American countries as Haiti, Bolivia, and Paraguay. Economic conditions between different social or economic classes within a given country vary even more widely. An accurate description of Latin America is possible only when these differences are all included. There is not time in a limited discussion to do this, but I hope that you will remember that there are many exceptions to the generalizations that I will have to make in order to cover the topic with which I am dealing.

[1] Address made at a conference on "Latin America and Inter-American Relations" at the University of Virginia, Charlottesville, Va., on Oct. 7 (press release 561).

Natural Resources

The generalization with which I shall begin is that Latin America is an area of large unutilized natural resources. In general, the countries of the area have the potential in terms of natural resources both to build a prosperous home industry and agriculture and to expand foreign trade. Some of the countries are exceedingly well endowed. For example, Venezuela has large deposits of petroleum and iron; Colombia has rich reserves of coal and iron; Peru has a wide variety of minerals; Brazil has a very wide range of natural resources generally, although explorations so far made have not disclosed the existence of large deposits of coal or petroleum; and Argentina has an abundance of some of the finest agricultural lands in the world. Exploration has so far not been carried far enough fully to indicate the extent of the area's natural wealth.

Despite an abundance of natural wealth in most of the countries of the area, especially in relation to present population, there are a number of handicaps that must be overcome in developing them. In terms of present technology and on the basis of presently known resources, Latin America is not as well endowed as the United States to meet the basic needs of an industrial society.

To a large extent, the physical environment of Latin Ameica is difficult and offers obstacles to economic development. For example, the Andean mountain range, which lies athwart the western part of South America, constitutes a formidable barrier to transportation and communication. Heat and humidity in large portions of the area are also unfavorable to optimum production. Land and mineral resources in a considerable number of the countries are limited. Given its vast area, however, which is some two and one-half times that of the United States and its known resources, it should be able to afford its present population a much higher standard of living than it now enjoys. However, since it also has one of the most rapidly increasing populations of any major area of the world, it faces a serious problem in increasing production rapidly enough to increase per capita income. For example, it is estimated, on the basis of present trends, that the population of Latin America will be around 500 million by the year 2,000. At present, its population is slightly in excess of that of the United States. If these estimates and similar estimates for the United States and Canada should prove correct, however, the population of Latin America will be more than twice that of the United States and Canada combined by the close of the present century.

Increased Output

A second generalization that may be made regarding Latin America is that during the past decade and a half it has increased its economic productivity at a considerably more rapid rate than the rate at which its population has been increasing. The following data, which are largely taken from a recent report by the United Nations Economic Commission for Latin America, are indicative of the really remarkable progress which Latin America has made since the Second World War: Population is increasing in Latin America, on the average, at a rate of from 2 to 2½ percent per annum. But output of goods and services has been substantially in excess of population growth. The per capita rate of increase in the volume of goods and services available to Latin America since the war has been around 3½ percent per year. Living standards have been raised appreciably as a result, but not all of the increased output has gone into increased consumption.

Economic development requires that capital be accumulated; and capital accumulation in Latin America since the close of the Second World War has been exceptionally intense, the investment rate approximating 16 percent of total national income. This compares favorably with the record of even highly industrialized countries. It has been estimated that more than 90 percent of the capital accumulated during the period was supplied from Latin America's own savings. The stock of capital per worker has increased on the average from $1,177 in 1945 to $1,409 in 1952, an increase of more than 25 percent. The outstanding feature of this development has been the expansion in manufactures. The value of manufactures increased from $6.8 billion in 1945 to $11.4 billion in 1952. This is an increase of better than 70 percent in 7 years. The value of manufactures surpassed the value of agricultural output in Latin America in 1947 for the first time and has outranked it ever since.

Notwithstanding this rapid rate of progress, there is still a great deal of popular dissatisfaction

with their present economic conditions among the governments and people of Latin America. Furthermore, it appears that the amount of this dissatisfaction is at least as great, if not greater, in those areas where there has been the greatest economic and social change. There are apparently many factors which help to account for this situation. First, average per capita income in Latin America is still very low in comparison with that of the more highly industrialized countries. The situation varies greatly as between countries; but, in all, the lot of the major part of the population is poor. In Latin America as a whole, per capita income is probably not more than ⅛ of per capita income in the United States. Health conditions in many areas may be considered poor by accepted standards. For example, it is estimated that the death rate in most of the Latin American countries is in excess of 100 per 1,000 live births. The comparative figure for the United States is 28 or 29 per 1,000. The average diet in a number of the countries is less than the diet which has generally been considered by nutritional experts as the minimum necessary to maintain health and efficiency.

The need for improved education in Latin America is also great. Many of the countries have illiteracy rates exceeding 50 percent, and few of them have effectively orientated their educational systems to the requirements of a modern industrial civilization.

Transportation facilities are also inadequate. Latin America has about ⅓ the railroad mileage of the United States and fewer motor vehicles than the State of New Jersey. Lack of farm-to-market roads handicaps the movement of food and other agricultural products.

Notwithstanding the low average level of income in Latin America and the unsatisfactory health, educational, and other conditions that go with it, there are in virtually all of the Latin American countries a limited group of very well-to-do people. Their standards of living, health, and comfort are as good as those enjoyed by our wealthier citizens. The contrast between the condition of the few and that of the masses of the people is accordingly very marked. Part of the dissatisfaction with economic conditions is therefore undoubtedly the result of the fact that the major portion of the population has not come anywhere near achieving the average standard of living of the more highly industrialized countries or of their own well-to-do classes. It is only natural for them to wish to achieve a greater rate of progress.

Furthermore, Latin American officials fear that the outlook for maintaining even the present rate of progress is not especially good, owing to a decline in the demand for, and falling prices of, a considerable number of their export products, such as tin, copper, and lead and zinc during the past 2 years. Our Latin American neighbors are understandably concerned over the situation.

Inflation

There are other reasons, however, why there is dissatisfaction among the masses of the people. One is that inflation in many countries is rampant and that it is hard to keep real incomes from falling, under such conditions. For example, the cost of living in São Paulo, Brazil, is reported to have risen from an index of 100 in 1948 to an index of 162 in 1953, and in Santiago, Chile, from 100 in 1948 to 256 in 1953. The cost of living in the United States during the same period rose from 100 in 1948 to 111 in 1953.

Although there has been a widespread increase in government assistance to labor in the field of social security in Latin America during the past 15 years, this in many cases has been financed through inflation and a system of taxation which have placed the bulk of the burden back on the workers. Furthermore, a considerable number of Latin American countries do not have inheritance taxes and progressive income taxes. Even where such taxes exist the rates are low and collection is often not fully effective.

An additional reason why there is not greater popular satisfaction with the rate of economic progress made in Latin America in recent years is the fact that, even though average per capita income has increased, there are large segments of the population which apparently have not benefited. In this connection the Mexican experience is enlightening. Mexico is among the Latin American countries that have done most to keep inflation in check. Furthermore, few Latin American countries have done more than Mexico to develop a middle class or to lessen the extremes of income between its poorer and wealthier classes. Its rate of economic progress from 1939 to 1950 was truly remarkable. Capital accumu-

lation during this period was unprecedented. There was a great increase in real income which permitted a considerable rise in total consumption. The following information, which is taken from the Report of the Combined Mexican Working Party entitled "The Economic Development of Mexico," indicates, however that the increased income has not been evenly distributed. There has been a shift in favor of profits, and against wages and salaries. As a result, a large part of the increase in consumption during the period 1939–50 was enjoyed by a small part of the population. About ½ of the national income was paid in the form of profits, rents, and interests to a relatively small part of the total population. On the other hand, large numbers of persons received low incomes.

Furthermore, workers in different regions of the country were affected differently by the increase in average real income. The standards of living for industrial workers and for agricultural workers in the new agricultural regions were above those in the older unimproved farming areas, and no significant improvement was discernible in the real income of farmers in the old areas or in the real income of industrial workers as a group. The position of a large number of individuals during this period was nevertheless improved, since they shifted from other types of activity to industry where wages were generally higher.

In one very real sense the rate of progress made in Latin America during the period in question was to a large extent the result of a situation which cannot be relied upon for continued progress. The principal reason for the progress was an improvement in Latin America's terms of trade, i.e. an increase in the prices of their exports in relation to the prices of their imports. There has not been the increase in economic productivity, especially in the export industries, that will be required if Latin America is to continue to increase its per capita national income. It appears that there has actually been no increase in the physical volume of Latin American exports since 1948.

Attitudes of Labor and Management

The working class has had its desires for high standards of living greatly stimulated. By definition, the raising of living standards would require a great increase in production. However, the workers often do not wish to increase their hours of work per day or week, which are often small (the necessity for choosing between leisure and greater income has not been appreciated), or to cooperate with management in raising productivity. The reluctance to increase their own productivity is based in part on suspicion of their employers and fear that increased productivity will only lead to more unemployment, or underemployment, of which there is now admittedly too much. In part this suspicion is warranted, because the management and the owners have often not yet adopted or approved the system of large-scale production and small unit profits. With some exceptions, both labor and management in Latin America will have to change their attitudes before there is to be a significant increase in productivity. There are encouraging signs in some countries that this is being done.

The Communists of the area and other anti-United States elements find the conditions which I am describing tailor-made to their purpose of fomenting local discontent and antagonism against the United States and United States companies operating in Latin America. For example, one of the standard arguments of the Communists is that the United States is trying to exploit the Latin American countries through private United States companies. Actually, insofar as productivity has been improved in Latin America, the United States-owned enterprises have made an important contribution. Furthermore, the import of capital which is put to productive uses can and does make it possible for capital-scarce countries to maintain a higher level of consumption than if they had to reduce consumption to the extent necessary to provide all the capital that they use out of domestic savings. The Communists and their associates, nevertheless, continue to urge that foreign-owned enterprises be nationalized and that further foreign capital not be allowed to enter the country. Fortunately, there appears to be a slowly growing recognition of the importance of productivity and capital in some labor circles.

The efforts of the Communists to sow discontent and discord are often made easier by other Latin American citizens, sometimes people in official positions, who increase misunderstanding by speaking and acting as though there were simple

solutions to Latin America's problems. For example, the view is often expressed that Latin America's failure to make greater progress is the result of the fact that the more highly industrialized countries pay Latin America too little for its raw materials and charge it too much for industrial products. Often these same individuals argue, apparently without considering that there is any inconsistency between the two positions, that Latin America should increase its duties against imported industrial products because they are so efficiently produced that the Latin American countries cannot compete with them without substantially increased tariff protection. It may be noted, furthermore, that it is common for the United States not to impose any duty on imports of most raw materials from Latin America, whereas it is rather general for the Latin American governments to tax the production or export of such materials, sometimes to the point of virtual confiscation. Should they choose to do so, the Latin American countries are, accordingly, often in the position both to reduce the price to their consumers of imported industrial products and to increase the returns to their producers of raw materials.

The contention is also often made by Latin American representatives that the more highly industrialized countries should assure their economic progress by undertaking to stabilize the prices of their raw materials in terms of the prices of industrial products.

Terms of Trade

Actually, as has been suggested earlier and as a recent study made by the Pan American Union indicates, from the outbreak of the Second World War to the present time the terms of trade of the Latin American countries as a whole, of the majority of the individual countries, and of most individual Latin American commodities have been very favorable. In recent years they have been at approximately the same level as at the beginning of the century. From 1937 to 1953 they became increasingly favorable to Latin America. As has also been suggested earlier, the experience of the Latin American countries during this period is an indication of the fact that high prices for their products have not been a panacea.

The terms of trade are, in fact, only one of the many factors which may influence the welfare of a country. For example, the terms of trade do not give sufficient weight to volume, which in the case of many products has often been a dominating element in the determination of international prices. The terms of trade also do not include any consideration of improvement in quality, which customarily occurs over any extended period of time, especially in the case of industrial products. The terms of trade may not, therefore, reflect the real prosperity of a country and they are likely to be even less of an indication of the prosperity of individual economic classes within a country. Venezuela and Brazil might be taken as random examples. The new President of Brazil, in a radio address last month, described the precarious economic situation existing in his country. This situation developed although the terms of trade were twice as favorable in 1952 as in the period 1935–39, and although it appears, even though complete statistics are not yet available, that its terms of trade for 1953 were at least as favorable as for 1952. On the other hand, Venezuela's progress and present prosperity are well-known to all observers of the Latin American situation, even though the terms of trade of her chief export product, petroleum, which constitutes regularly over 90 percent of her total exports, improved by less than 30 percent between the period 1935–39 and 1953.

Coffee Prices

The fact that high prices are not necessarily beneficial to the producers of a product might be illustrated with particular reference to coffee. There was an increase of more than 10-fold in the price of coffee in Brazil between 1937 and November 1953, before the price increase last winter. This increase was largely the result of the fact that Brazil, the world's largest producer of coffee, is now producing considerably less coffee than in the period before the Second World War, while world consumption of coffee is, of course, much higher. The price increase was not, however, an unmixed blessing, especially to the coffee growers and more particularly to the workers. The exchange earned from coffee was one of the important factors which accounted for an expansion of the currency in the coffee-producing countries, and this and other factors brought about the inflation that I have referred to earlier. During the period 1937–53 the cost-of-living index in

São Paulo, the principal coffee-producing region of Brazil, increased from 22 to 166, more than seven-fold. Considerably more than half of the increased return was, therefore, required to pay increased costs of living. Furthermore, as a result of governmental policy in many of the coffee-producing countries, including Brazil, the exporter was required to convert his exchange in a controlled market under such terms that the coffee industry was forced to subsidize other activities. The result was that the benefit of the increased coffee prices went only to a limited extent to those who worked coffee lands, especially the laborers.

What I have said about coffee and about dissatisfaction in Latin America with its economic conditions suggests that high prices, or even economic development itself, alone, may not be enough to meet the needs of the people, especially the poorer classes.

This leads me to a further generalization about Latin America, namely, that it is an area likely to be faced by increasingly complex problems which have no short-term solution, for which it must continue, as in the past, to find answers largely on the basis of its own resources, industry, and genius. In order to provide increased standards of living for its people it must use its resources wisely. It must increase its economic productivity not only by the application of improved techniques of production but through the industriousness of its people.

It must find a proper balance between the various segments of its economy. Agriculture, industry, and transportation must be developed in harmony. In some of the Latin American countries this will require increased attention to agriculture, where per capita output is now less than it was before the Second World War. For example, considering 1948–49 as 100, per capita agricultural output in Latin America in the period 1934–38 was 107, and in 1952–53 it was 101. This means that the area is now less able to feed itself than it was prior to the beginning of the Second World War. Comparable figures for the United States are 84 in the 1934–38 period and 112 in the 1952–53 period.

Specialization vs. Diversification

Another problem faced by Latin American countries in increasing average living standards will be to strike a proper balance between specialization and diversification of industry. At the present time most of the Latin American countries are heavily dependent on one, or at best three or four, raw materials and foodstuffs. For example, tin is the bellwether in Bolivia; nitrates and copper in Chile; sugar in Cuba; coffee in Brazil, Colombia, El Salvador, and Guatemala; meat and wool in Uruguay; petroleum in Venezuela; and lead and zinc in Mexico. The principal reason for this situation is probably the fact that the Latin American countries can purchase a greater volume of foreign goods through specializing in these commodities than by producing other commodities. They rely upon the foreign exchange received from the export of these commodities to pay for most of their imports of consumer goods and of capital goods needed for economic development and for servicing foreign investments. If the countries continue, as will apparently be necessary, to rely on foreign imports and on foreign investment, they must maintain healthy conditions in these basic export industries. On the other hand, so long as they are heavily dependent on these industries, their economies are especially vulnerable to fluctuations in the world prices of the commodities in question.

Another problem faced by the Latin American countries is to reach the proper balance between encouraging savings and investment, on the one hand, and permitting consumption levels to rise, on the other. If income were equally distributed in Latin America, it is probable that the rate of savings would be less than at present, since the small amount of increase in income that the average citizen might receive initially would be much more likely to be spent to satisfy consumption needs than to be saved. It would be helpful to the masses in Latin America, however, if some way could be found of inducing the well-to-do to put a larger portion of their savings into productive undertakings. At present inflation and other conditions often lead them to invest in real estate or in foreign countries, rather than in productive enterprises at home.

Another very difficult problem for the Latin Americans is to determine the extent to which their development will be financed by local savings and by foreign investment. The most readily expansible source of economic development funds is undoubtedly private foreign capital. The economic development process could undoubtedly be

speeded up if local conditions were made attractive to such capital. On the other hand, this may involve the problem of absentee ownership and may run counter to nationalistic desires for local ownership and operation of industry.

Just one final generalization. Latin America is an area in which we have many vital interests and with which we should accordingly cooperate to the extent that we and our Latin American neighbors can find mutually desirable programs. Except for Canada, many of the countries of the area are our closest neighbors. It contains regions of great strategic importance from the viewpoint of the United States and Western Hemisphere defense. It produces many raw materials that are important to us in peace and war. From the standpoint of military defense of the hemisphere our role is, of course, of crucial importance to the Latin American countries. Commercially, they are dependent upon us as a market for about half of their exports. In the case of the countries which are geographically closer to us and in the case of some commodities such as coffee, we purchase a much larger portion of their exports—our exports to Latin America are equivalent to about 20 percent of our total exports. We have always been closely bound together with them and they and we have generally cooperated effectively together. I am sure that close cooperation between ourselves and them will continue, notwithstanding many differences of opinion, because it will continue to be in our mutual interest to cooperate and to resolve our differences in a spirit of understanding and accommodation.

Arrival of Pakistan Prime Minister

Remarks by Acting Secretary Hoover [1]

May I express my deep pleasure at the opportunity afforded me personally and on behalf of Secretary Dulles to welcome you on your return to Washington. We in the United States are particularly proud of the many bonds of friendship which link the peoples of Pakistan and the United States. Your previous residence here as Ambassador of your great country has made you well known to Americans of many walks of life. Thus it is with a sense of greeting old friends that we who are gathered here welcome you. May your visit be a most pleasant one for you both.

[1] Made at Washington National Airport on Oct. 14 on the arrival of Prime Minister Mohammed Ali and Begum Ali (press release 578).

National Olympic Day, 1954

Proclamation 3069 [1]

WHEREAS the XVIth Olympic Games of the modern era will be held at Melbourne, Australia, November 22 to December 8, 1956, with Winter Games to be held at Cortina d'Ampezzo, Italy, January 26 to February 5, 1956, and the Pan American Games will be held at Mexico City in March 1955; and

WHEREAS by a joint resolution approved April 22, 1954 (68 Stat. 58), the Congress has declared that these games will afford an opportunity of bringing together young men and women representing more than seventy nations, of many races, creeds, and stations in life and possessing various habits and customs, all bound together by the universal appeal of friendly athletic competition; and

WHEREAS the said joint resolution calls attention to the fact that the United States Olympic Association is presently engaged in assuring maximum support for the teams representing the United States in these athletic contests, and requests the President to issue a proclamation designating the sixteenth day of October 1954 as National Olympic Day:

NOW, THEREFORE, I, DWIGHT D. EISENHOWER, President of the United States of America, do hereby designate Saturday, October 16, 1954, as National Olympic Day, and I urge all citizens of our country to do all in their power to support the XVIth Olympic Games, the Winter Games, and the Pan American Games so as to insure that the United States will be fully and adequately represented in these games.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this second day of October in the year of our Lord nineteen hundred and fifty-four, and of the Independence of the United States of America the one hundred and seventy-ninth.

[SEAL]

Dwight D. Eisenhower

By the President:

WALTER B. SMITH
Acting Secretary of State.

[1] 19 *Fed. Reg.* 6469.

Nuclear Physics, A Triumph of Man's Mind

by James B. Conant
U.S. High Commissioner for Germany[1]

When I lay in the sand of Alamogordo on July 16, 1945, waiting for the first atomic explosion in the history of mankind, I would never have thought that one day I would open in Berlin an American exhibit devoted to the peaceful and constructive applications of atomic energy. While I was waiting in the dawn of that summer day, I discussed with some of the nuclear physicists present the probabilities as to the successful outcome of the experiment. For, as everyone now knows, we could not be then certain that an atomic explosion was possible.

In the course of our discussion someone mentioned the fact that we had once feared that, if an atomic explosion occurred, this would set off an uncontrolled chain reaction of the nitrogen in the atmosphere and the world would go up in flames. Exact calculation had already proved conclusively that such fears were pure nonsense: A nitrogen chain reaction could not occur under any circumstances. Nevertheless, this idea of an uncontrolled chain reaction was evidently still in my subconscious mind. When the incredibly powerful light of the first atomic explosion appeared, the irrational thought hit me: The whole world has gone up in flames. Such was the deep impression made on me by the first atomic explosion in the history of man.

The tremendous sound of the explosion 10 miles away reached us only after what seemed like an interminable minute. But long before I heard the explosion, the devastating picture which my fantasy had momentarily conjured up had disappeared and I was face to face with reality—a reality which was terrible enough. Mankind is faced with great and difficult problems—that much is certain—but on the other hand we do not have to reckon with the fear of a world explosion, nor indeed with the fear of the radioactive poisoning of the entire atmosphere of this globe.

Tonight, however, I do not propose to talk about the military applications of atomic energy nor the political problem which the release of atomic energy has brought with it. For the exhibition which we have prepared here in Berlin deals with quite different aspects of atomic energy.

Tonight, rather, I want to devote my lecture to the peaceful uses of atomic energy. It is an interesting fact that in America we knew soon after the wartime development had begun that a controlled chain reaction was possible, but none of us could be sure whether an explosive chain reaction could be brought about. Only the laws of nuclear physics could give an answer to that question, and they were then still partially unexplored.

Controlled Chain Reaction

Let me say a few words about the controlled chain reaction. In this connection I would like to tell another personal story, if I may be permitted. Some of you may already have read it in the two articles which Mrs. Fermi, the wife of the great Italian-American physicist who played such a decisive role in the release of atomic energy, has published in the *New Yorker* magazine.

It was he who brought about the first controlled chain reaction toward the end of 1942 under the grandstands of the football field at Chicago University. As soon as the remarkable experiment

[1] Address made on Sept. 24 at the Berlin Technical University on the occasion of the opening of the U.S. exhibition "The Atom" in the 1954 German Industrial Exhibition (Hicog press release).

had been successfully carried out, I received a long-distance call from Dr. Arthur Compton, the director of the Chicago atomic research project. In this telephone conversation he said, in accordance with a prearranged code, "The Italian navigator has reached the new world."

"And what is the attitude of the natives?" I asked excitedly. "Extremely friendly," replied Compton.

It was thus I knew the first controlled chain reaction had succeeded.

Some of you may ask: "What exactly is a controlled chain reaction?" That is exactly what our exhibit will explain. In fact, we have constructed there an apparatus which does not differ very much from the first atomic pile which Fermi put in operation at Chicago University in December 1942.

I am not going to try to outline tonight those portions of theoretical physics which you will find explained repeatedly in our exhibition. Such an exposition might be considered presumptuous on the part of an organic chemist. For there is a certain rivalry between chemists and physicists, one that, I hope, is always friendly. But physicists do not relish having a chemist venture into a field which is their own. But now back to my subject.

Those of you who know the theory may chiefly be interested in the models, instruments, and equipment displayed at our exhibition. For the others I hope that our exhibition may be an instructive introduction into the new science of nuclear physics.

Surely one must admire the intelligence of man which has enabled him to produce a controlled chain reaction. But what is the controlled chain reaction good for? May I emphasize again that I am not talking about the explosive chain reaction nor about the political problems which it has created. The controlled chain reaction in a nuclear reactor produces energy in form of heat on the one hand and chemical elements with strong radioactivity on the other. These may be produced either as byproducts of nuclear fission or by subjecting elements to neutron bombardment within the reactor.

Atomic Power for Industry

I have just mentioned that a nuclear reactor can produce energy which can be used to run steam engines or to produce electric power. I feel that so much has already been written in the newspapers about the atom as a source of energy that I need not dwell on this subject, nor shall I discuss the economic feasibility of using atomic power for industrial purposes. But I do want to emphasize one point. The basic technical problems have long since been solved. It is the economic application of atomic energy for industry which must still be developed. As you know, I am sure, President Eisenhower gave the signal on September 6 which started the construction of the first American atomic power plant.[2] Four more experimental plants will be built soon, and these five power plants are destined to help solve the problems connected with the economic production and use of atomic energy.

The reactor as a source of industrial energy still lies in the future. But the use of radioactive products, on the other hand, is already a matter of great importance, for they have become invaluable tools of scientific research. Today they may be regarded as the most important result of the entire reactor program. In America radioactive materials have been produced for several years in commercial quantities, and they are shipped to more than 50 foreign countries. In England, particularly at Harwell, similar programs have been developed. For substances whose radioactivity is short-lived, England naturally remains the principal supplier for Europe.

In order to give you an idea of the quantities of radioactive materials produced, I would like to refer to a single experiment being carried out at Brookhaven. This is the so-called Gamma Field, where the effect of such radiation on plants is studied. The source of radiation used there, a small block of radioactive cobalt, is only one of many similar sources used in numerous American laboratories and research institutes. But this one source has a radiation power of 1,800 Curies, the equivalent, that is, of 1,800 grams of radium. This may not impress you unless I tell you that there are only 1,500 grams of radium available in the world today.

I have so far spoken of only one of the applications of radioactive materials. Several of the other applications, because of their particular type of radiation, are an extremely practical and cheap substitute for X-ray machines. Many have

[2] BULLETIN of Sept. 20, 1954, p. 396.

greater intensity of radiation than radium. This tremendous power of radiation makes artificially produced radioactive materials extremely dangerous for human beings. It is no exaggeration to say that the protective techniques which have made the handling of such materials possible constitute a veritable triumph of human ingenuity.

When you go to the exhibit, you will find in the center of the main hall the actual apparatus which has been constructed to enable a person to carry out experiments behind a protective wall. The magic hands which are thus operated from a distance are almost as skillful as the human hand itself. But I must give a word of caution, not to warn you against possible dangers of the terrific radiation or poisoning—which, in fact, is present when this apparatus is used. This warning does not concern any possible dangers from radioactivity or poisoning. Quite the contrary. I must warn you that what you will see are harmless models.

I have spoken of the use of some of the radioactive products of an atom pile as a substitute for a Roentgen tube. Let me remind this audience of the significance of the great discovery made by Roentgen when he was professor at Würzburg in the last part of the 19th century. The news of this great discovery was soon broadcast to the world, and rapidly physicians realized that the medical profession had been given a most valuable tool. This was followed by the discovery of radium, which is used for very special purposes, particularly in the therapy of cancer. Today the reactor has given us a whole series of radioactive elements which, even in small quantities, are more than a complete substitute for Roentgen and radium radiations. When you visit our exhibition, you will find interesting displays showing the use of radioactive iodine in the diagnosis of thyroid cancer and its metastases as well as in the localization and therapy of brain tumors.

Radioactive Materials in Research

Radioactive materials open new possibilities not only for the physician but also for the scientific researcher which are not as striking but may be just as important. The use of radioactive materials in scientific research is difficult to explain in nontechnical words. Some of these materials are called tracers because they enable the scientist to follow complicated chemical reactions with great precision. In fact, one can follow these processes with the Geiger counter very much the way a dog follows the trace of a rabbit with his nose. This comparison may be made clearer by two specific examples. Both cases show how a radioactive element, the radioactive form of carbon, has been involved in the solving of secrets of nature.

I have a personal interest in the first case, as one set of experiments in this field was described in a paper published in 1941 which carried my name among others, although my own contribution to this work was small. In those days radioactive carbon could be made only in very small quantities and with great difficulties in the laboratories. Today it is produced in relatively large quantities like many other radioactive materials, and production costs are considerably lower. In this initial experiment carbon dioxide was used which contained radioactive carbon and was therefore radioactive itself. In experiments with living animal tissue a very surprising discovery was made: Some of the carbon dioxide was absorbed by this tissue and converted into sugar-like carbohydrates. Many of you will think that this was hardly a revolutionary discovery. In fact, this observation was so unexpected that the experimenters felt at first they must have made an error; for according to one of the basic postulates of biochemistry, animal tissue could not assimilate carbon dioxide but rather produce it by the oxidation of carbohydrates. It was another accepted postulate that assimilation of carbon dioxide by a living cell and its conversion to a carbohydrate only took place in green plants under the influence of light.

These postulates have now been shown to be completely false. Many animal and plant cells convert carbon dioxide into sugar, and each step in this process has been followed in considerable detail by following the trace of the radioactive carbon. I regret that I cannot give you more of the details, fascinating as these details and their consequences are for the scientist. Let me just give you the conclusion reached on the basis of these experiments: Green plants convert carbon dioxide into carbohydrates under the influence of light; many animal tissues are able to accomplish the same transformation, the required energy provided by the oxidation of some other sugars to carbon dioxide.

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Relation to Archeology

Now let me jump from biochemistry to archeology. One of the most difficult problems which often faces the archeologist is the dating of ancient discoveries. The second example I want to describe to you illustrates one of the most interesting and most recent applications of radioactivity. Here, however, we are not concerned with an artificially produced radioactive material but rather with one that is found in nature. This method was developed by an American physical chemist, Willard F. Libby, of Chicago University.

In the upper atmosphere a small percentage of nitrogen is constantly being transmuted into radiocarbon through the bombardment with cosmic rays. The percentage of this radiocarbon in the atmosphere is unbelievably small and at the same time constant: one atom of radioactive carbon to 1,000 billion atoms of ordinary carbon. The radiocarbon is oxidized to carbon dioxide, which is absorbed by plants together with ordinary, nonradioactive carbon dioxide. Thus, radioactive carbon gets into the tissues of all living organisms in the same relative quantities as mentioned before: one atom of radioactive carbon to 1,000 billion atoms of ordinary carbon dioxide.

Thus, when a plant or animal dies, the amount of radioactivity in its tissues, which is extremely small, corresponds to that in the atmosphere. After about 5,500 years—the so-called half life of radioactive carbon dioxide—half of the carbon 14 has undergone decomposition and its radioactivity is thus only half of what it was initially. After about 11,000 years it is only one-quarter, and so on. Accordingly, by determining the radioactivity of any matter containing carbon dioxide, one can determine how many years ago it acquired the carbon dioxide from the atmosphere.

I must point out that these measurements are extremely difficult and can only be carried out with instruments of the utmost sensitivity. Nonetheless, it is possible to date archeological discoveries that are from 1,000 to 20,000 years old with an accuracy of about 200 years.

The accuracy of this method of radiocarbon dating was checked by measuring the radioactivity of a piece of wood taken from the inside of one of our giant California sequoia trees. The age of this tree was known accurately through the number of its annual rings.

One of the interesting conclusions that have been reached is that the last glaciation of the Northern Hemisphere occurred about 11,000 years ago and that the famous cave paintings in the Lascoux cave near Montignac in France are about 15,000 years old. Linen wrappings from the Dead Sea scrolls of the Book of Isaiah, which were recently found in Israel, were determined to be about 1,900 years old.

If you have understood my explanations, you will have noticed that the two examples that I gave you are actually closely connected. Both have in common the assimilation of carbon dioxide by organic tissue. As a former professor I have a weakness for practical illustration. We have here a Geiger counter. I do not want to describe this instrument in detail. Suffice it to say that it reveals the presence of radioactive radiation. If this rose had been grown in an atmosphere containing radioactive carbon dioxide or with the use of radioactive fertilizer, it would itself radiate and affect a Geiger counter.

Unfortunately, it would take too long for a plant to absorb carbon dioxide for anyone to demonstrate such a transformation in the course of a single lecture, but I am going to place this rose in water containing a radioactive phosphorus compound. Perhaps later I shall see whether or not I can convince you that there has been any assimilation of the radioactive material. Long ago I learned to be cautious about doing experiments before audiences. In the days when I was a chemistry professor, I had more than one failure in such attempts. What I predicted sometimes did not come to pass. On one such occasion an elderly visitor to my lectures came up afterward and said, "Young man, you would do better as a lecture demonstrator if you spoke after the event as an historian and not before the event as a prophet"—a piece of advice which I must say has stood me in good turn in my new profession. But of political matters I do not propose to speak tonight.

The United States Government is contributing the exhibit entitled "The Atom" to the annual Berlin Industrial Fair because in the United States there were brought to a focus the results of what may be thought of as a great international undertaking. One may well consider the results achieved in the last 15 years as a great accomplishment of the creative human spirit. As an American I am proud of the part American scientists have played. And it is highly satisfactory to re-

member that in this endeavor they worked closely with certain great scientists who were refugees from the totalitarian regimes of Europe and who found asylum in America. Let me name here Szilard, Wigner, Teller, Weisskopf, and Fermi.

History of Atomic Physics

At this point may I remind you of some of the more important steps in the history of atomic physics in this century. Radioactivity was discovered by the Frenchman Becquerel in 1896 and studied thoroughly by Pierre and Marie Curie who, 2 years later, discovered and isolated radium. In 1919 the English physicist Rutherford transformed an atomic nucleus for the first time. By bombarding a few atoms of nitrogen with alpha particles—that is, nuclei of the element helium—he succeeded in transforming them into oxygen. The next decisive step was the discovery of neutrons, this electrically neutral particle which alone makes possible the release of atomic energy through a controlled chain reaction. On the basis of experiments made by Booth and Becker in Germany in 1930 and Irene Curie and Frederic Joliot in France in 1932, and on the basis of his own calculations, the Englishman Chadwick predicted the existence of neutrons and then proved this experimentally.

The discovery of the neutron opened a new chapter in experimental physics. It is hard to overestimate the importance of the new methods which were developed in a field which we have already learned to call neutron physics. The bombardment of elements with neutrons provided a way of carrying out many transmutations. The bombardment of the element with the greatest atomic weight, namely uranium, produced some strange effects which were at first misinterpreted. In January 1939, Professor Otto Hahn together with Fritz Strassmann made the remarkable discovery that in the process of the bombardment of uranium with neutrons there appeared elements of about half the atomic weight of the original uranium. This discovery was made here in Berlin, and I am delighted that Professor Hahn is with us here in this city tonight.

This discovery of Hahn and Strassmann was quickly made known to the scientific world and set up an intellectual chain reaction in which the names of Frisch, Meitner, Bohr, and Fermi are particularly connected. In the United States the news spread by word of mouth that in all probability what was at hand was an atomic fission. This was soon verified by experiments in many laboratories. Within a year more than a hundred experimental papers had been published. By the beginning of 1940 it was clear that one of the uranium isotopes would undergo atomic fission when bombarded with neutrons and in the process liberate more neutrons. Thus, the possibility of a chain reaction on a large scale had to be considered. It seemed that man was on the verge of demonstrating what Einstein had predicted more than 35 years before—namely, that matter could be converted into energy.

In the meantime Europe had gone to war. American, English, and Canadian scientists—with generous assistance of American industry—began to work feverishly, mostly on American soil, to solve the problem of how to release atomic energy on a large scale. What these scientists accomplished can truly be called a miracle of research. Once again, I am not referring to the atomic bomb but to the enormous collective scientific achievement that the solution of the thousandfold problems of releasing atomic energy on a large scale required. On the basis of experiments with matter available only in such minuscule quantities that they could not be made visible even with the best of microscopes, computations were made with the aid of extrapolation leading up to the construction of an atomic pile. The enlargement factor involved amounted to about 10 billion.

As an organic chemist dealing with the reactions of molecules I must confess that I was highly skeptical when my friends the physicists first told me of their plans. They proposed to release atomic energy by the fission of a kind of uranium which constitutes only approximately one-half of one percent of natural uranium. This isotope known as U-235 they considered to be the best fuel for a controlled chain reaction. In order to raise the probability of the fission of this isotope they proposed to reduce the speed of the liberated neutrons by having the equivalent of a break. According to the physicists' calculations it would be possible to control a chain reaction if uranium and a so-called moderator designed to slow down the fast neutron were piled up in layers. Such a construction came to be known as an atomic pile. According to theory it seemed certain a minimum mass of uranium—the critical mass—would be

needed before the chain reaction became self-sustaining, but the exact size of this critical mass could not then be calculated accurately. And when plans for an atomic pile were first drawn up in 1942, one did not know whether it would have to be the size of a table or as large as a football stadium. In our exhibition you will find a full-size replica of a typical so-called graphite reactor not unlike the first one built in Chicago.

A Triumph of Man's Mind

I am very much tempted at this time to speak in more detail not only of the model of the reactor which you will see but of the other models which are shown in our exhibition. But since you will all have an opportunity of seeing these things for yourself, I shall not speak further about the exhibition. Rather let me, in conclusion, return to the title I have given to this lecture, namely "Nuclear Physics, A Triumph of Man's Mind." In so doing, I am clearly drawing your attention to the pure scientific aspects of the whole undertaking, and in this connection an old story comes to mind. A distinguished German theoretical physicist was once asked to give a lecture on the relation between pure and applied physics. His speech was very brief. He said: "The relation is very simple—the two have nothing whatever to do with each other."

That he had slightly oversimplified the situation, I hardly need to point out this evening. Nevertheless, the story has point here tonight, for some of my listeners may have forgotten, as they have listened to the mass of technical details I have expounded, the exciting development of the basic scientific ideas. For I have dwelt at some length this evening on the significance of the new discoveries in the field of nuclear physics for everyday life. When you visit our exhibition you will see for yourselves the benefits that have arisen for mankind out of the scientific developments of the last 20 years. Artificially radioactive materials are used today, and will be used even more in the future, in medicine, in agriculture, and in innumerable other scientific fields. I need not delve into the immense possibilities arising out of the production of energy and heat by controlled chain reaction. But let us forget the practical uses of atomic energy. Let us look at the history of the development of nuclear physics in the same spirit as we would listen to a symphony or an opera, or gaze at an architectural monument, or look at a painting.

It is often difficult for the layman to realize to what extent the entire history of nuclear physics has been the result of the amalgamation of the intellectual powers of many men from many nations and through many periods of history. I am not referring primarily to the fact that after 1940 a large group of scientists worked together day by day. I am thinking rather of what may be called the unconscious intellectual collaboration of scientists who worked independently over many years. The people I have referred to in this lecture must be regarded as forming only the last link in a great chain of scientists who have been concerned with the structure of matter and the relation of matter and energy. It is the work of this whole host of scientists who have developed new concepts and tested them by experiment that has laid the solid foundations, the results of which have come to a climax in our controlled release of atomic energy.

The nonscientist often believes erroneously that such material achievements as the release of atomic energy are the results solely of experimental work and of engineering skill. He sometimes imagines that the experimenters pursue their goal by a mere trial and error method. Such an idea is completely false. The example of Einstein's famous formula relating energy and matter serves to show the significance of new ideas of a highly theoretical nature. Indeed, new concepts are often considerably more important than the results of experiments, and in fact many important discoveries of an experimental nature are the result of new conceptual developments. Scientific theories are best regarded as guiding lines which indicate to the scientist a fruitful line of experimentation. In the extraordinary and totally unexpected developments of nuclear physics, mathematics has played a decisive role, for example.

I have used the word unexpected in the preceding sentence advisedly. For one of the most fascinating aspects of the history of the development of atomic energy comes to light when one remembers what was said a short time ago by the best informed scientists about the nature of the universe. You will find on the exhibition wall a definition of an atom which goes back to the early Greeks and which would have been subscribed to

by all scientists as late as the beginning of this century. This is the definition that the atom is a particle which cannot be split any further. Now we accept as a matter of course the illogical statement that nuclear physicists are concerned, among other things, with the splitting of something that cannot be further divided—namely, an atom.

Today, most of us take for granted that a chain reaction involving uranium can bring about the liberation of energy by the conversion of matter into energy, and we glibly say that this is but a demonstration of the truth of Einstein's famous formula, "Energy equals mass times the square of the speed of light." Indeed, the repetition of this formula even in the daily press has made it almost a household word. But let me remind you of what an outstanding physicist of two generations ago said about the same subject. I quote from a lecture of Professor Tate in 1876: "The grand test of the reality of what we call matter—the proof that it has an objective existence—is its indestructibility and uncreatability, if the term may be used, by any process at the command of man." And describing how the chemist can count on exactly the same amount of matter at the end of a series of chemical transformations as at the beginning, the lecture concluded: "This, then, is to be looked upon as the great test of the objective reality of matter."

I should be trespassing far beyond the limits of this lecture if I attempted to discuss the impact of the developments of the new physics on the basic postulates of the philosopher. I would like only to point out the revolutionary effects of the whirlwind development of nuclear physics on some of the basic premises of our thinking, and I am using revolutionary not in the sense of a rebellion against the past but in order to emphasize the breathtaking speed with which the human spirit has been able to pile one new thought and one new discovery upon the other.

It is therefore with a feeling of reverence and awe for what the human spirit can accomplish that I ask you to enter the doors of the American exhibit on the atom.

The history of the last 300 years is a proud record of what human beings can accomplish through the manipulation of ideas. It is a story of the flowering of the creative powers of the human intellect. In this troubled period of history under the shadow of fusion and fission bombs, we do well to stress this phase of modern life. To have constructed a great fabric of new concepts and conceptual schemes, arising from experimental observation and fruitful beyond measure of new experiments, is an achievement which, as long as there is recorded history, must be regarded with the greatest admiration. Like the Parthenon and the cathedrals of the Middle Ages, the scientific theories of the 19th and 20th centuries stand as witnesses to what the human spirit can accomplish. With such thoughts in mind, I now declare the American portion of the Berlin Industrial Fair open, since I shall not have the privilege of participating in the official opening tomorrow at the appointed time.

Exchange of Messages on Trieste Accord

On October 5 President Eisenhower sent messages of congratulations on the Trieste accord to Luigi Einaudi, President of the Republic of Italy, and Marshal Josip Broz-Tito, President of the Federal People's Republic of Yugoslavia. On October 9 the President received replies to these messages. Texts of the four messages follow:

President Eisenhower to President Einaudi

I wish to convey to you my profound gratification and that of the American people at the achievement of an agreement on the delicate Trieste problem. This agreement, worked out through long months of difficult but friendly and constructive endeavor, gives testimony to the farsighted statesmanship and good will of the government of Italy. It is my earnest hope and expectation that this arrangement will usher in a new era of fruitful collaboration that will contribute to the prosperity and security not only of Italy and Yugoslavia but of all the free nations of Europe. We agree, I am sure, that this fine example of the ability of neighbor nations amicably to settle extremely difficult questions will be highly reassuring to our own peoples and those of friendly nations throughout the world.

Please accept, Mr. President, my heartfelt congratulations at the efforts which you and the members of the Italian government have exerted

to make possible this agreement which has so materially contributed to the possibility of maintaining peace in the world.

Sincerely,

DWIGHT D. EISENHOWER

President Einaudi to President Eisenhower

Mr. President, Ambassador Clare Boothe Luce has personally delivered the message you have addressed to me at the moment of the conclusion of the agreement on the problem of Trieste and I wish not to delay in telling you how gratifying is for me this most valuable evidence of the satisfaction with which the American people and their President have welcomed the event.

You have stressed the farsighted and constructive spirit that has animated the Italian Government during this arduous diplomatic issue and have availed yourself of the understanding reached between Italy and Yugoslavia to reaffirm your confidence in a fruitful cooperation of the two bordering nations and in the help that the mutual relations among all peoples will derive from it.

The agreement arrived at by my country will not fail, as you say, to have profound and favorable repercussions on the happier future of a peaceful and strongly united Europe.

In assuring you that Italy is well aware of the friendly contribution brought by the United States of America to the settlement of the question of Trieste, I thank you, Mr. President, in the name also of the Italian Government, for the noble expressions contained in your message, while I beg you to believe me,

Sincerely yours,

LUIGI EINAUDI

President Eisenhower to Marshal Tito

Permit me on behalf of the American people personally to extend my warm congratulations to you and to the other members of your government at the achievement of an agreement on the Trieste problem. This agreement, worked out with good will, patience and unremitting endeavor, reflects honor upon your government, for the broad, farsighted statesmanship which has made this agreement possible.

I am sure that you share with me the sense of optimism engendered by the agreement. All of the peoples of the free nations of Europe, as well as the American people, will now be encouraged by this arrangement which opens the way to greater security in Southeastern Europe against any possible encroachment and fosters the hope that improved relations between Yugoslavia and Italy will enhance the general welfare and peace in Europe.

I wish to convey to you my deep gratification at this accord which I am convinced will materially contribute to that which is closest to our hearts, the maintenance of peace, of security and of prosperity in the world.

Sincerely,

DWIGHT D. EISENHOWER

Marshal Tito to President Eisenhower

Permit me to thank you most cordially on my behalf as well as on behalf of the members of the Yugoslav Government for the extremely warm congratulation you were kind enough to extend to me on the occasion of the agreement achieved on the Trieste problem.

I avail myself of this opportunity to thank you for your great efforts in this matter which came particularly to expression in your message sent through Mr. Murphy and which greatly contributed to the overcoming of the last obstacles and to the reaching of an agreement. I fully share with you the sense of optimism that this agreement will have great significance both for the normalization of relations between Yugoslavia and Italy and for the strengthening of peace and security, not only here but generally in Europe.

I wish to convince you that, regardless of the sacrifices Yugoslavia has made for this agreement, I as well as the other members of the Yugoslav Government feel a satisfaction that in this part of Europe a problem has been settled which had worried the world.

Assistant Secretary Robertson Visits Formosa

Press release 569 dated October 11

Assistant Secretary for Far Eastern Affairs Walter S. Robertson left on October 9 for Taipei, Formosa, where he will confer with Chinese Government officials on current and prospective U.S. aid programs.

Mr. Robertson was accompanied by Walter P. McConaughy, Director of the Office of Chinese Affairs, Department of State, and by Frank L. Turner, who is in charge of Chinese aid programs for the Foreign Operations Administration.

American Ambassador to Cambodia Presents Credentials

White House press release dated October 2

White House Announcement

Robert M. McClintock presented his credentials as American Ambassador to Cambodia on October 2. Mr. McClintock, who arrived in Phnom Penh, the capital of Cambodia, on September 30, is the first resident American Ambassador to that country. The United States, which has recognized Cambodia as an independent country since 1950, has until now been represented by an Ambassador resident at Saïgon, Viet-Nam, who served concurrently as Ambassador to Viet-Nam and Cambodia and Minister to Laos. A chargé d'affaires has heretofore been resident at the American Embassy at Phnom Penh.

The assignment of a resident Ambassador at Phnom Penh constitutes further recognition by the United States of the completion of Cambodian independence through the full assumption by Cambodia of the powers of self-government.

In a joint communique issued at Washington on September 29 at the end of the United States-French talks on Indochina,[1] it was announced that the channel for French and United States economic aid, budgetary support, and other assistance to Cambodia, Laos, and Viet-Nam would be direct to each state, and that the United States representatives would begin discussions soon with the respective governments of the three states regarding direct aid.

United States economic assistance to Cambodia, as well as to Viet-Nam and Laos, has been provided directly for some time. United States budgetary support for the Cambodian armed forces has until now been provided through the French Government. As soon as arrangements can be made, budgetary support will henceforth be provided directly to the Government of Cambodia. The Cambodian Government is in full accord with this decision to provide assistance through direct channels.

[1] Bulletin of Oct. 11, 1954, p. 531.

President's Message

When he presented his credentials, Ambassador McClintock delivered the following message from President Eisenhower to Norodom Sihanouk, King of Cambodia.

Your Majesty: The people of the United States have watched with concern and admiration the struggle of Cambodia against unwarranted Communist aggression. The United States is happy that Cambodia has reaffirmed its independence and that your Kingdom is in a position now to undertake a course which will secure that sovereign freedom for which your people fought.

At this time when Cambodia has so convincingly demonstrated its independence and its stern determination to maintain that independence, I desire Your Majesty to know that my Government will be pleased to consider ways in which our two countries can more effectively cooperate in the joint task of stemming the threats facing your territories and maintaining peace and prosperity in your Kingdom.

With assurances of my personal esteem and high regard,

Sincerely,

Dwight D. Eisenhower

FOA Sends Flood Relief to Nepal

The Foreign Operations Administration on September 27 announced a program to alleviate suffering among the stricken people of Nepal, where recent floods combined with an earthquake have left approximately 1,000 dead and more than 132,000 homeless.

Dr. Alexander Langmuir, Chief, Epidemic Control Programs, U.S. Public Health Service, is now in Nepal making an on-the-spot survey to determine the full extent of the assistance needed. Because of the lack of communication facilities in the country, air reconnaissance of the disaster areas has been authorized.

Meantime, FOA has authorized an emergency expenditure of $75,000 for the purchase of such badly needed supplies as vaccines and antibiotics, particularly for waterborne diseases.

World Security and the World Health Organization

by David McK. Key
Assistant Secretary for International Organization Affairs[1]

President Eisenhower in his State of the Union Message this year affirmed that "In the world as a whole, the United Nations, admittedly still in a state of evolution, means much to the United States. It has given uniquely valuable services in many places where violence threatened. It is the only real world forum where we have the opportunity for international presentation and rebuttal."

At times, nations may seem to use this international forum of the United Nations to stress disagreements. Differences of viewpoint are sometimes expressed in harsh terms which are dramatic and make the headlines. Yet the function of the United Nations as a forum is of great value. It has been likened to that of a safety valve which serves to reduce pressures. The airing of disputes through debate often reduces the risk of resort to force. Moreover, a basic principle familiar to democratic countries is that in the long run free debate exposes falsehoods. The discussions in the General Assembly last November were invaluable in demonstrating the falsity of Communist charges that the United States Air Force had employed germ warfare in Korea. A distinguished representative of the medical profession, Dr. Charles W. Mayo, outlined with great skill how the Communists have perverted the use of the "conditioned reflex" technique to obtain false testimony from prisoners.[2] The General Assembly, representing world opinion and recognizing the emptiness of the Communist allegations, strongly condemned the charges.

However, the United Nations is far more than an effective and unique world forum. It is, in the words of the President, "sheer necessity" and "a place where the nations of the world can, if they have the will, take collective action for peace and justice."

Before the Minnesota Medical Association last June, I had the privilege of reviewing at length the accomplishments of the United Nations in opposing aggression, in peaceful settlements of disputes, and in setting up machinery which helps to secure and maintain the peace.[3] At that time, I also referred briefly to the work of the United Nations and its specialized agencies in the social and economic fields. Since World War II, the United States and other peace-loving nations have taken the lead in developing a number of specialized technical agencies within the United Nations system. The work of these specialized agencies makes headlines only infrequently; yet it is as truly a part of cooperative international action for peace as are the activities of the United Nations itself to which I have already briefly referred. In the longer term, these agencies—the World Health Organization (WHO), the Food and Agriculture Organization (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labor Organization (ILO), and others—may perform work of great importance in removing the root-causes of war.

The Vicious Cycle

Throughout history, most of mankind has been diseased, hungry, and poorly housed. For 6 out of 10 human beings—for 9 out of 10 in many eco-

[1] Address made before the American Public Health Association at Buffalo, N. Y., on Oct. 11 (press release 563 dated Oct. 8).

[2] BULLETIN of Nov. 9, 1953, p. 641.

[3] *Ibid.*, June 28, 1954, p. 976.

nomically underdeveloped areas—these remain the normal conditions of life today. As a result, the stability of half the world is menaced by a vicious social and economic cycle. Poor health means lower productivity; lower productivity means a lower standard of living; a lower standard of living means less food, education, and poorer living conditions; these, in turn, mean poor health. Thus the cycle of misery is completed.

The peoples to whom these conditions are a grim reality are ever more aware that modern technology in economically advanced countries provides a healthier and vastly more abundant life. Communist propagandists are, of course, exploiting this situation by claiming that communism alone provides the solution. Unless this destructive cycle in economically underdeveloped areas is broken, mounting tensions may rend the world in conflict.

This situation gives an immediate urgency to article 55 of the United Nations Charter, under which member states agree to take joint and separate action to promote higher standards of living and conditions of economic and social progress. The specialized agencies are a major means by which nations are acting jointly to these ends. You, as experts in public health, are aware that the World Health Organization is among the foremost in contributing toward breaking the vicious circle I have described and thus helping to eradicate the social and economic causes of war.

The continuing achievements of WHO can be evaluated in either economic and material or in psychological and spiritual terms. I shall refer only briefly to the former aspect, but I should like to discuss more fully the psychological aspect.

Since the creation of WHO, there have been many favorable references to its accomplishments measured in terms of material or economic gain. A recent example is contained in the current WHO *Newsletter* (October-November 1954). Afghanistan, with WHO assistance, is now well on the way to nationwide control of malaria, a disease which each year has sapped the health and economic productivity of one-quarter of its population. By next year, Afghan nationals, trained by the WHO team, will be able to continue their national malaria-control campaign without further aid from international workers. For one-quarter of the population of that country, a crushing burden on productivity will be lifted for the first time. What this may mean economically can be seen from the results of malaria-control campaigns in nearby countries where, in some areas, crop productivity has increased by one-third.

These material results, multiplied many times over in the many countries which WHO is assisting with a wide range of health activities, are already helping impressively to break the destructive cycle of disease and poverty.

Psychological Contributions of WHO

The psychological or spiritual contributions of WHO to world peace are less tangible than the economic contributions and so far have received far less attention. I am convinced, however, that in the long run they are more fundamental, for they deal with men's minds. WHO, like other specialized agencies, is promoting democratic and not totalitarian ways of life. It is promoting self-respect, self-reliance, and freedom for the individual.

Dr. Leonard Scheele, the Surgeon General of the Public Health Service, in a notable address last June at the Midwest Conference on World Health sponsored by the National Citizens' Committee, emphasized the importance of WHO as "an application of democratic principles." From my own observations of the work of WHO, I heartily endorse this view. It is significant that the Seventh World Health Assembly meeting in May of this year elected as its president an African, Dr. Togba of Liberia. Dr. Togba in his presidential address pointed out that in WHO "the concept of democracy is being translated into action without regard to size or development of a country, race, culture, or creed."

The structure of WHO reflects democratic principles of organization. Membership is open to all states on an equal basis. All, large and small, may participate with equal voting rights in the annual World Health Assemblies. Moreover, the decentralized regional structure of WHO has enabled the organization to be even more responsive to the wishes and needs of member states. WHO is unique among international agencies in the extent to which it makes use of regional offices and committees. Nations discuss with the regional office staffs their needs for various types of WHO assistance. The regional committees then enable nations and territories to meet on an area basis to discuss their health needs and to review a regional health

program and budget. Only after this regional review are these programs submitted to WHO headquarters for integration into an overall annual program and budget and for final approval or modification by the World Health Assembly. In this way, nations participate at several stages in the determination of WHO programs—individually, at the regional level, and on a world scale.

WHO is implementing the principles of democracy not only in its organization structure, to which I have just referred, but likewise in its activities and programs. WHO activities are helping to build effective communication between the peoples of the world. By "communication" I mean not merely the modern technological means of communication, such as the radio and airplane, but the man-to-man exchange of ideas and accommodation of differences which are the basis of understanding. Through this process the WHO activities are doing something to surmount the many barriers—cultural, political, and ideological—which still separate nations and peoples. Many WHO projects illustrate this.

Take as a typical example the WHO malaria-control team in Formosa. In addition to an American entomologist, there are on that team a malariologist from Greece and a sanitary engineer from the Philippines. Operating as a team, these technicians are performing outstanding work in helping the people and government of Nationalist China to control the menace of malaria. More than that, they are demonstrating together that democracy in action translates itself into better understanding, education, and improved health and living conditions.

Altogether, the WHO staff is composed of 700 health experts from 50 countries, including about 100 from the United States. They are sharing common tasks and common interests and are working toward common objectives. They are learning to understand each other's viewpoints and to live harmoniously in a world which technology has shrunk so that we are all neighbors.

WHO technicians, whether at headquarters or on field projects, are likewise becoming acquainted with the peoples they are helping and are identifying themselves with the needs of these peoples. But this is, of course, a two-way process. On the other hand, throughout the economically underdeveloped areas of the world, the villager, the farmer, and the artisan are discovering that cooperative international action can achieve tangible benefits for them in their own lives.

"Mr. Who"

In this connection I cannot resist retelling an amusing but pertinent story about the World Health Organization, which is known in many parts of the world as "WHO." An Indian doctor working on malaria control in a remote village in Northern Thailand asked the local head man a few questions: Had he heard of Mr. Nehru? "No." Had he heard of President Eisenhower? "No." Had he heard of the U. N.? "No." Had he heard of WHO? "Oh, yes. Mr. Who is the man who sprayed my house, and we have had no more sick babies—very good man."

This incident, which has been multiplied many times over, illustrates how the work of WHO and other specialized agencies gets to the grass roots and effectively helps the common man. Moreover, the peoples of underdeveloped areas are discovering, sometimes for the first time, that they, themselves, can actively participate in measures to improve their conditions of life. A mother taking her child to a rural health center, where she will learn the elements of child hygiene; or a village population voluntarily pooling their labor to help build a sanitary well—these apparently insignificant events actually often represent a new awakening of individual and community initiative.

Such, then, are some of the intangible accomplishments of WHO. They are found in the nature of the organization; in the bringing together of technicians from many countries to work with the people of many countries; in the stimulation of local and national initiative. They add up to the promotion of democratic rather than totalitarian attitudes and processes. They are helping to make possible effective communication, a genuine meeting of minds. In this respect, just as surely as in terms of economic gains, WHO is helping gradually to reduce tensions which could explode into war. It is not a rapid process, but it is in the right direction—and it is of importance for the security of the free world and of the United States.

Today I have dealt mainly with WHO and its achievements, which illustrate how the specialized agencies of the United Nations system play an important part in removing the root causes of war. This work, of course, must be coordinated. It is evident that WHO is alive to the need for continued

improvements in coordination, as shown by the words of the Director-General, Dr. Candau, in his annual report on the work of WHO for 1953.[4] He refers to "a growing awareness in all of us of the need to plan WHO's role in promoting world health as comprising only one part—although admittedly a vital and central one—of the general framework of all national and international efforts to improve social and economic conditions throughout the world."

Support for and strengthening of all activities of the United Nations system and strengthening of the free world are integral parts of United States foreign policy. Addressing the ninth session of the General Assembly only last month, Secretary of State John Foster Dulles underlined the wholehearted belief of the American people in the United Nations Charter.[5] This charter, he said, "recognizes that peace is not a passive concept but a call to action." The United Nations system is meeting this call to action for peace, and not least through the World Health Organization, which is mobilizing resources to promote the conditions of peace.

[4] U. N. doc. E/2592 dated May 4, 1954.

[5] BULLETIN of Oct. 4, 1954, p. 471.

INTERNATIONAL ORGANIZATIONS AND CONFERENCES

U.S. Views on Soviet Disarmament Proposal

Speaking before the General Assembly on September 30, the Soviet Representative, Andrei Vyshinsky, introduced a disarmament proposal which he requested the Assembly to add to its agenda. On October 6 the Assembly voted unanimously to include the item, and on October 11 Committee I (Political and Security) began debate on the Soviet proposal. Following are a statement released to the press by Henry Cabot Lodge, Jr., U.S. Representative to the General Assembly, following Mr. Vyshinsky's speech before the Assembly; two statements in Committee I by U.S. Representative James J. Wadsworth; and the text of the Soviet draft resolution.

STATEMENT BY MR. LODGE

U.S. delegation press release 1965 dated September 30

The bulk of the Vyshinsky speech was a violent attack, filled with wild inaccuracies, on the United States in an effort to smear us as plotters of a preventive war. It was as reckless as Secretary Dulles' speech was moderate.[1] The world knows President Eisenhower and how utterly he is opposed to a preventive war. The world will therefore repudiate and deplore this particularly unsavory bit of Soviet mudslinging.

The Vyshinsky proposal on disarmament will, of course, receive our careful and earnest consideration. We are glad to see that the proposal seems to denote something of a change in the attitude of the U.S.S.R. toward two of the important principles which the United States has been trying for years to get the Soviets to accept. These are, first, that nuclear weapons, on the one hand, and conventional armaments and armed forces, on the other, are all related parts of the total picture and must be dealt with in a balanced fashion; second, disarmament must be subject to effective inspection and control which will protect the security of all states.

At any rate, Mr. Vyshinsky's proposal appears to offer more hope than the Soviet attitude expressed by Mr. Malik in London just this past summer when he rejected out of hand the British-French memorandum,[2] which included the two important principles I have just mentioned.

[1] BULLETIN of Oct. 4, 1954, p. 471.

[2] *Ibid.*, Aug. 2, 1954, p. 182.

Of course, the decisive test is how far the Soviet Union has really moved from its previous rigid position on disarmament. We shall get the answer to this question when Mr. Vyshinsky's proposal is studied and discussed in detail. Meantime, I wish to emphasize that the United States will consider this proposal objectively and with the sincere hope that it will prove to be a real step toward a comprehensive, effective, and workable disarmament.

STATEMENTS BY MR. WADSWORTH

U.S. delegation press release 1973 dated October 12

The First Committee of the General Assembly is entering its ninth year of activity—and its ninth year of hard work on the stubborn problem of disarmament. All these years of discussion have not brought forth a single agreement to scrap one gun or tank or bomb or to discharge one soldier.

People all over the world, who know little of world politics, know this disheartening fact, yet it is in response to their will to peace that we continue to seek a solution. Our failure in the past is due mainly to the unhappy fact that we chose to tackle the problem of armaments in a period torn with conflict. The two sides locked in this conflict have not been disposed to trust each other. Least of all has it seemed wise to trust the side whose extreme secretiveness is a part of its way of life.

How can we establish the mutual trust on which disarmament should rest?

We submit that we cannot establish trust on either side by demanding and repeating "I promise—trust me." Trust is a most delicate quality, and it cannot be shouted into existence. In a matter as vital as armaments we can establish it only if both sides first agree on a fair plan of action and then carry out each step of that plan on schedule and in plain sight of each other.

It is a most difficult task, but it is possible. If it is carried out in good faith, one of its chief results will be the growth of the very quality of trust whose absence has paralyzed our efforts up to now.

The Basic United States Position

There are four basic ideas which have animated the United States from the very beginning of the disarmament discussions in the United Nations.

First, the United States wants disarmament. The United States was one of the countries which proposed article 26 of the United Nations Charter, calling for "the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and economic resources." We want disarmament that will disarm. We want more than a mere toast where states clink their glasses and drink to the health of disarmament. We want disarmament that will work.

Second, we believe that there is more than one path by which the world can progress toward disarmament. Over the years we have marked out a number of paths on any or all of which we could make a start toward disarmament: controlling atomic energy; limiting the size of the armed forces of the Great Powers; a system of disclosure of all armed forces and all armaments with verification by an international organ. We have always recognized that it is impossible to solve this problem unless *all* the Great Powers agree on the solution. That is why we have suggested many avenues of discussion in the hope that, even if we could not reach full agreement with the Soviet Union, at least we could narrow the differences that separate us. That has been our approach in the past, and it is still our approach.

Third, we want the world to be rid of nuclear weapons. The world will not be rid of nuclear weapons by merely shouting from the roof tops that they are prohibited or that they will not be used while one nation behind its Iron Curtain continues to stockpile them. The United States is not going to use atomic weapons or any other weapons in violation of the United Nations Charter. The United States is not going to use atomic weapons or any other weapons except in defense against aggression. That is our pledge, and it is also the pledge of every member of the United Nations including the U. S. S. R. That pledge, however, gives security to no one so long as one of the chief countries making the pledge has its Iron Curtain behind which it can prepare to violate its pledge without fear of detection.

Fourth, we want world peace. We know that another war would be a catastrophe. We recognize that in the past arms races have preceded armed attack by aggressor nations. At the same time we cannot stop an arms race unless all the racers stop running, and we cannot know whether all the racers have stopped running if one of them

insists on running on a concealed track. For the free world to stop arming while the Soviet Union keeps on increasing its strength would be an invitation to the very war we seek to avoid and to the destruction of freedom.

These are the lessons of hard experience. We think of them as we continue our search for a disarmament that gives security to all. Thinking of these lessons, we hold that secure disarmament in a world without trust requires two things above all.

First, it must cover all armaments in a single plan—for bayonets and high explosives are still deadly in this atomic age.

Second, it must contain safeguards so that each side actually disarms in plain sight of the other, with the firm certainty that all pledges are being carried out every step of the way.

We believe that all states will agree generally with these principles. Why is it that we have been unable to translate these principles into a workable disarmament program? The record of the Disarmament Commission and its Subcommittee reveals a great deal on this subject. Let us now discuss it.

The Record in the Disarmament Commission in 1954

We agree with the Soviet suggestion that as far as possible we should forget the past, and we shall therefore devote far less time to the past than did the Soviet representative.

The disarmament resolution passed by the Eighth General Assembly was notable for its sixth paragraph, which suggested that the Disarmament Commission study the desirability of establishing a Subcommittee consisting of the representatives of the powers principally involved to seek in private an acceptable solution and report to the Disarmament Commission.[3]

Last April the Disarmament Commission, in conformity with this resolution, set up such a Subcommittee consisting of the Soviet Union, United Kingdom, France, Canada, and the United States. This Subcommittee met in London, in private and as we hoped, free from the temptations of propaganda. Then the Subcommittee made a report to the Disarmament Commission.[4] As a part of its report, the Subcommittee made public the entire records of the London meetings. The world is now in a position to judge the progress or lack of progress at these private meetings and to determine the responsibility for their success or failure.

The plain motive of the Eighth General Assembly in suggesting once again private meetings of a few powers was to produce new approaches to disarmament—approaches which would have at least some hope of narrowing the differences that have separated the Soviet Union from the free world. Let us examine the record of the Subcommittee of Five to see to what extent these hopes were fulfilled.

At the very first meeting the Soviet Union submitted a disarmament proposal, but it was not a new proposal. It was, word for word, the proposal which the Soviet Union had submitted to the Eighth General Assembly and which the Assembly had found unacceptable. This was certainly a discouraging start, and the same pattern prevailed throughout the discussions. The representative of New Zealand, in the Disarmament Commission discussions in July, aptly characterized the Soviet attitude as one of "stony immobility."

In contrast, the other members of the Subcommittee tried to explore two avenues of approach to disarmament which had never before received any thorough treatment in the United Nations. The United States submitted a working paper on the establishment of an international control organ with appropriate rights, powers, and functions. In presenting this paper we stressed that we were not putting forward a rigid position with the thought that all other states "should either take it or leave it." The United States representative said: "Let us think of this paper merely as one approach in an attempt to come to grips with basic issues of substance. From the discussions of specific problems we hope to narrow the difference between us and perhaps arrive at a position which all of us can approve." Furthermore we pointed out that the control organ, as we drew it up, would be as applicable to a program based upon Soviet concepts sketched over the past several years as it was to the U.S. program.

Despite our efforts, the Soviet representative refused all serious discussions of our paper. As a matter of fact, he never got any further than the first paragraph, which referred to the General

[3] *Ibid.*, Dec. 14, 1953, p. 838.
[4] *Ibid.*, Aug. 2, 1954, p. 177.

Assembly resolution of January 11, 1952, which the U.S.S.R. had opposed.

The second new avenue of approach was contained in the British-French memorandum of June 11 which has been so much in the news in recent weeks. This dealt with the phasing and timing of the chief elements of a disarmament program. The representatives of the United Kingdom and France have fully explained these proposals, and I shall not repeat their explanations. The United States supported and still supports the proposals.

In London the Soviet Union refused to discuss the British-French proposals and, as in the case of the U.S. suggestion, never got beyond the first paragraph. This was one of the comments by the Soviet representative: "It is perfectly obvious that the proposal of the United Kingdom and France and supported by the United States does not provide at all for the prohibition of atomic weapons but is designed to justify their use. The adoption of such a proposal would in no way contribute to a slackening of international tensions or to the removal of the dangers of an atomic war. What is more it could lull the vigilance of the peoples toward this danger."

Now, after all, the Soviet representative at this General Assembly has introduced a resolution suggesting that these proposals of France and the United Kingdom be used as a basis for an international disarmament treaty.

We are indeed gratified that the Soviet Union has apparently changed its views and now recognizes the genuine value of the British-French proposals as a fresh approach to this great problem. But the change in position—and we hope it is a change—did not manifest itself until September 30.

The Soviet Proposal

The first ray of hope that we have received in many years from the Soviet Union was the proposal made by the Soviet representative to this Assembly on that date. That ray was considerably dimmed, though not extinguished, by Mr. Vyshinsky's statement yesterday. We have studied the proposal carefully and, we believe, objectively. What I am going to say now reflects our initial impressions of a proposal which at several key points has been and remains obscure in its meaning. Our impression may readily be altered as a result of the discussions in this committee and later in the Disarmament Commission.

First, we recognize that on one and only one important matter the Soviet has taken a clear and unambiguous stand which somewhat narrows the differences which have separated the Soviet Union from the free world. The Soviet Union now concedes that 50 percent of the agreed reduction in armed forces and conventional armaments may take place before any action to prohibit nuclear weapons. This is paragraph I (2) (a) of the Soviet proposal.

Second, in paragraph I (2) (c) the Soviet Union calls for "inspection on a continuing basis to the extent necessary to ensure implementation of the convention by all states." This is one of the obscure points on which further discussion is required. It could be a great improvement over the 1952 Soviet formula for an international control organ that "shall have the right to conduct inspection on a continuing basis, but it shall not be entitled to interfere in the domestic affairs of states."

Any control organ with powers "to the extent necessary to ensure implementation of the convention" must clearly have the full run of a country. Mr. Vyshinsky pointed out that during the war button factories in the Soviet Union manufactured munitions. The International Control Commission must therefore have the right to inspect button factories in order to determine whether or not they are manufacturing munitions. This is precisely what the Soviet delegate denied to us during the London talks. We had hoped that this resolution indicated a change in position. However, if we interpret correctly Mr. Vyshinsky's statement of yesterday, any country can frustrate the inspectors simply by posting on a munitions factory a sign reading "Keep out—this factory makes buttons."

Third, a commission with adequate powers would of necessity also have the authority to take effective action whenever it found a violation. We do not infer by this that the commission would have its own army which could be used to punish a violator. It would, however, have certain powers, some of which we enumerated in our paper on the international control organ which we submitted to the Subcommittee of the Disarmament Commission in London. These powers included the right to suspend allocations of fissionable materials to an offending country and to close down

factories utilizing fissionable materials in that country.

The Soviet representative in London stated categorically that the control commission could do nothing beyond referring the violations to the Security Council, where each of the permanent members is in a position to veto all action. We hoped that the new Soviet proposals, with their language about full powers to ensure implementation of the treaty, might represent a change in Soviet position. Mr. Vyshinsky yesterday very thoroughly dispelled that hope. He made it clear that the control organ, where there is no veto, could do nothing to punish violations. No violations can be punished except with the consent of the Soviet Union, armed with its veto power.

Fourth, there was one issue in London which perhaps received more extended discussion than any other—the issue of the relationship in time between the prohibition of nuclear weapons and the institution of international control. The Soviet Union in London took their traditional line that the prohibition of atomic weapons and the institution of controls should be simultaneous. "Simultaneous" is a pretty word, but, as we have pointed out on many occasions, in this context it is literally meaningless.

The prohibition of atomic weapons is a single act. On the other hand the institution of controls is a long series of acts. The real question is this: At what point during the development of the control organ would prohibition of atomic weapons take place?

The United States, United Kingdom, France, and Canada all took the position at London which was set forth in the British-French memorandum: that the prohibition of nuclear weapons would take place as soon as but no sooner than when the control organ was in a position to assure that the prohibition would actually prohibit. The Soviet Union, on the other hand, took the position that in fact the prohibition should take place as soon as there was agreement that there should be a control organ. This is like saying: "Since we now agree to build a house, let's move in right away." An agreement will not keep the rain out.

Mr. Vyshinsky, in his statement yesterday, gave a new meaning to the word "simultaneous." He said that the prohibition of nuclear weapons and the institution of international controls must be completed within the same period. In other words, we must simultaneously complete building the house and moving into it. This, of course, is an improvement on moving into the house before it is built. But it raises some questions. What if we agree to move in and the house never gets built? What if the time limit for building expires, and the house is unfinished—do we have to move in anyway? In short, just how much of an improvement the new position is depends upon the detailed schedules of building and of moving in. Mr. Vyshinsky has substituted for his old formula which was impossible a new formula which is merely vague and requires further study.

Fifth, another example of this need for study is paragraph I (1) (a), which speaks of agreed levels and reduction of armaments from the level of December 31, 1953. We studied this provision carefully in the English and French translations. Frankly, it has no meaning whatever. I am not sure that I understood Mr. Vyshinsky's explanation of this paragraph. As Mr. Vyshinsky pointed out when we listened to the translations, conditions are far from the optimum. However, if I understood correctly, it is now fairly apparent that the Soviet Union proposes that the reductions start from December 31, 1953, levels and take place in two stages, 50 percent of the reductions to be in each stage. We are still unclear as to where the process ends. How do we determine the levels to which the armed forces and armaments are to be reduced? We still do not know whether the Soviet Union continues to insist upon flat percentage reductions from December 31, 1953, levels. Mr. Vyshinsky said that he was not pressing for percentage reductions at this time. He did not indicate that he had abandoned his previous requests or that he was accepting any alternative formula.

We are still hopeful that these Soviet proposals represent an important step in the direction of an agreed disarmament program. They must, however, be clarified and elaborated. Large segments of the disarmament program are not touched at all in these proposals. This was clearly pointed out by the representatives of the United Kingdom and France. There is a tremendous amount of hard labor ahead of us before we can turn any of the proposals now before the General Assembly or the Disarmament Commission into a practical disarmament program.

This is a technical subject. We do not believe

that the General Assembly is the forum for going into the technical details. We believe that the very fact that the Soviet Union has seen fit to present these new proposals underlines the wisdom of the Eighth General Assembly in suggesting private discussions by the powers principally involved. We would support the reactivation of the Subcommittee to deal with these Soviet proposals and the other disarmament proposals which are before the Disarmament Commission. In short, we believe that the Soviet proposals should be studied in the hope that many of them in some form will be embodied in a disarmament treaty. We definitely do not reject them.

The Outlook

During the Subcommittee meetings in London and again during the disarmament discussions in New York, we pointed out that the Soviet approach to disarmament had three main features which not only prevented agreement but also destroyed the possibility of genuine negotiation. Let us review those features and consider to what extent they are applicable to the new Soviet proposals. In the *first* place, the Soviet Union in the past has confined itself to proposals too vague to have any meaning. Ambassador [Morehead] Patterson in the Disarmament Subcommittee aptly likened the Soviet proposals to a book with a table of contents followed by nothing but blank pages. We are sorry to say that the current Soviet proposal fits this description. It will require much elaboration before it will be really meaningful.

Second, the Soviet proposals in the past have been long on pledges and short on safeguards to insure that the Soviet Union would observe its pledges. It has refused any type of international control which would result in a genuine lifting of the Iron Curtain. The present proposals use language sufficiently broad so that it would be possible for the Soviet Union, under this proposal, to agree to genuine and effective safeguards. Whether it in fact is prepared to take such a step will probably be determined only after we get down to detailed discussions.

Third, even if we assume full Soviet observance of pledges, the past program would have had as its result the disarmament of the free world without disarming the Soviet Union. Thus under their previous plans the most important elements of strength of the free world—its nuclear weapons and its bases—would be eliminated. On the other hand, the most important features of Soviet strength—its vast armies and its conventional weapons—would be merely reduced by one-third. From this standpoint, the present proposal is a distinct improvement on previous proposals. It is entirely possible that when it is elaborated it would be consistent with the security of other states. Again, we cannot tell this until we can find out what it means.

If the Soviet Union has really abandoned its policy of disarming the free world without disarming the Soviet bloc, this is indeed a change in policy. The previous policy, as we pointed out in the Disarmament Commission, was far older than the Disarmament Commission or than the United Nations. In fact it was a Communist policy even before there was a Soviet Union. We can find it in the writings of Lenin as early as 1916 when he said:

> Only after the proletariat has disarmed the bourgeoisie will it be able, without destroying its world historical mission, to throw all armament on the scrap heap; the proletariat will undoubtedly do this, but only when this condition has been fulfilled, certainly not before.

Until the Soviet Union shows some regard for the security of other states, until the Soviet Union looks on disarmament as a method of avoiding war and of improving living conditions of mankind rather than as a steppingstone to strategic advantages for itself, there can be no progress toward disarmament. The United States is willing and indeed eager in the light of the developments of the past week to engage in further talks and negotiations which may give promise of progress toward the goal of world peace. We hope that the world will view realistically any further negotiations and discussions and will not seek prematurely to paint a bright picture of progress which might turn out to be a mirage.

Conclusions

In conclusion let me reaffirm our wish to explore all avenues where there is a genuine prospect of progress toward disarmament that will really disarm. The President of the United States, in his inaugural address, stated certain fixed principles which would guide him in pleading our just cause before the bar of history and in pressing our labor for world peace. The very first of these principles contains the following language:

We stand ready to engage with any and all others in joint effort to remove the causes of mutual fear and distrust among nations and so to make possible drastic reduction of armaments. The sole requisites for undertaking such effort are that, in their purpose, they be aimed logically and honestly toward secure peace for all; and that, in their result, they provide methods by which every participating nation will prove good faith in carrying out its pledge.

The present Soviet proposals do appear to open an avenue for further discussion. It must be emphasized, however, that these proposals, like past Soviet proposals, are merely a beginning. There are many important parts of a disarmament program which these proposals do not touch at all, and even where the Soviet proposals suggest a solution in most instances that solution is too vague and ambiguous for the world to judge its merits. We hope there has been a real change in the Soviet outlook, a change that will make possible measurable progress toward the goal for which everyone must strive—a genuine and lasting peace.

U.S. delegation press release 1976 dated October 12

Just a very brief statement on the rather remarkable statement we have just heard from the distinguished delegate from the Soviet Union.

He started out by talking about inaccuracies in my own statement and wound up by talking about a great many things on which I never had anything to say. However, I think that all through my prepared remarks the delegate of the Soviet Union will find that, due to the shortness of the time since he completed his speech of yesterday, I said perhaps I misjudged him, perhaps I misunderstood him, if I understood him correctly. In those places where he has actually corrected me, I think that I should thank him for this correction. The interpretations, however, which one places upon the English language as it comes through the earphones is one thing as opposed to the corrected verbatim report which we will, of course, get later on. However, there are one or two points which Mr. Vyshinsky made which I feel might be worthy of very brief comment because I feel that we should not keep the committee sitting too long over this sort of an altercation.

In the first place, in attempting to deny some of the things I have said, Mr. Vyshinsky did confirm two of the things I said. First, that any action to deal with violations of a disarmament plan must be subject to the Security Council and its veto; second, he confirmed my contention that he had not completely abandoned his previous demands for a flat percentage reduction. Perhaps Mr. Vyshinsky's translation when I was talking on that particular line might have been subject to misinterpretation, but my recollection is that I said that he did not press for his reduction plan at this time—and I think that that was an accurate statement.

I would also agree very thoroughly with my distinguished colleague from the Soviet Union that there is a vast amount of difference between opposition and discussion on the one hand and rejection on the other. I stand, however, by my statement made in my prepared remarks and would ask the members of this committee to read the record of the London meetings in which Mr. Malik of the Soviet Union did in fact categorically reject the points that were made by the United States in its working paper on a control organ and by the Franco-British proposal.

Finally, I believe with Mr. Vyshinsky that it might be of considerable value to all the members of this committee to read the entire text of Mr. Lenin's article on disarmament from which I quoted. At least I have avoided the accusation that the quote was incorrect; according to Mr. Vyshinsky it was taken out of context. But at the same time I feel that it is a revealing quote, and it is something which has been held fast to on the part of the Soviet Union in disarmament talks throughout most of our past several years.

Altogether I believe that colloquies of this type are extremely valuable to the members of the committee. It is, of course, possible to attempt to confuse and befog the issue by talking about matters having nothing to do with the points at issue. However, at the same time, that also reveals the weakness of the argument of the person doing it.

SOVIET DRAFT RESOLUTION

Following is the text of the disarmament proposal which the Soviet representative, Andrei Vyshinsky, introduced in a speech to the General Assembly on September 30 and which he requested the Assembly to add to its agenda. On October 6 the Assembly voted unanimously to include the item.

U.N. doc. A/2742 dated September 30

I. The General Assembly instructs the United Nations Disarmament Commission to prepare and submit for con-

firmation by the Security Council a draft international convention (treaty) designed to strengthen peace and increase international security and providing for the prohibition of atomic, hydrogen and other weapons of mass destruction and their elimination from the armaments of States, a substantial reduction in armaments and the establishment of international control over the implementation of these decisions on the basis of the French and United Kingdom proposals of 11 June 1954.

Accordingly, the convention (treaty) should contain the following basic provisions:

(1) The following measures shall be taken simultaneously:

(a) In the course of six months (or one year), States shall reduce their armaments, armed forces and budgetary appropriations for military requirements to the extent of 50 per cent of the agreed levels. Armaments and armed forces shall be reduced from the strength of armaments and armed forces existing on 31 December 1953, and appropriations shall be reduced from the amount of actual expenditure on military requirements during the year ending 31 December 1953.

(b) For the purposes of supervising the fulfilment by States of the obligations in connexion with the reduction of armaments and armed forces provided for in sub-paragraph (a), a temporary international control commission shall be established under the Security Council with the right to require States to provide the necessary information on the measures taken by them to reduce armaments and armed forces. The commission shall take the necessary steps to supervise the fulfilment by States of the obligations assumed by them in connexion with the reduction of armaments, armed forces and appropriations for military requirements. States shall periodically supply the commission at established intervals with information concerning the implementation of the measures provided for in the convention.

(2) On completion of the measures referred to in paragraph (1), the following measures shall be taken simultaneously:

(a) In the course of six months (or one year), States shall reduce their armaments, armed forces and budgetary appropriations for military requirements by the remaining 50 per cent of the agreed levels from the strength of armaments and armed forces existing on 31 December 1953, and shall reduce their appropriations from the amount of actual expenditure on military requirements during the year 31 December 1953.

(b) A complete prohibition of atomic, hydrogen and other weapons of mass destruction shall be carried into effect, the production of such weapons shall be discontinued and they shall be entirely eliminated from the armaments of States; all existing atomic materials shall be used only for peaceful purposes.

The carrying out of these measures must be completed not later than the carrying out of the measures taken for the reduction of armaments and armed forces referred to in paragraph (2) (a), and the production of atomic and hydrogen weapons shall cease immediately, as soon as a start is made with the reduction of armaments, armed forces and appropriations for military requirements in respect of the remaining 50 per cent of the agreed standards.

(c) States shall institute a standing international organ for the supervision of the implementation of the convention (treaty) on the prohibition of atomic, hydrogen and other weapons of mass destruction, the discontinuance of the production of these weapons and their elimination from the armaments of States and the reduction of armaments, armed forces and appropriations for military requirements.

This international organ shall have full powers of supervision, including the power of inspection on a continuing basis to the extent necessary to ensure implementation of the convention by all States.

II. In connexion with the proposal concerning the prohibition of the "use of nuclear weapons except in defence against aggression" in the Franco-British memorandum of 11 June 1954, the General Assembly instructs the United Nations Disarmament Commission to study and clarify this question and submit its recommendations.

International Financing of Economic Development

Statement by Roger W. Straus
U.S. Representative to the General Assembly[1]

Allow me to take this opportunity to acknowledge my great appreciation to be associated in the work of this Committee with the distinguished men and women constituting its membership. I come here not as a trained economist, not as a government official. I come as a businessman, who, for the last 40 years, has been associated with a business organization that has operated in many parts of the world. It has contributed markedly to the economic development of some. Through this experience I have had firsthand opportunity to observe some of the opportunities, needs, and problems which will be the subject of our discussions in this Committee.

In his address before the 10th Inter-American Conference at Caracas early this year,[2] our Secretary of State pointed out that, in today's interrelated world, "No government adequately serves its own people unless it also is concerned with well-being in other countries." Obviously, no country can divorce itself from the problem presented by

[1] Made in Committee II (Economic and Financial) on Oct. 8 (U.S. delegation press release 1972).

[2] BULLETIN of Mar. 15, 1954, p. 379.

the existence of extremely low standards of living in large areas of the world. The postwar years have witnessed a growing realization that the attack on poverty, disease, and ignorance calls for cooperative effort on the part of all of us. This realization is a new and vital force in international relations.

All of us must join in every practical way to bring our knowledge, our science, and our tools to bear upon this problem. Nevertheless, since economic and social progress depends primarily on the efforts of the people concerned, each country must decide for itself what it is prepared to do about its own economic development. Each country must decide for itself what institutions it will encourage to bring about the production of the things its people want. Each country must itself determine what steps it is prepared to take to attract outside capital to help with the job.

In my own country, our traditional policy has been to develop our economy through private enterprise. This emphasis on individual freedom and on the constructive force of individual initiative is a basic part of our philosophy. It is this system which has generated the economic vitality which has been a mainspring of our economic development.

While we are convinced that the fullest possible exercise of private initiative is the basis of sound economic development, we are, at the same time, aware that it cannot be offered as a panacea for all economic ills.

In many underdeveloped countries, the first need is for basic development in such fields as transport, power, communications, education, and public health.

To provide the economy with this so-called "overhead capital" often involves large-scale investment in projects which, at least in their working stages, are not self-liquidating. The fields of education and public health have been traditionally regarded as largely the responsibility of government. In other fields, such as transport, power, and communications, investment can often be provided by the joint effort of government and private enterprise when, for one reason or another, private capital is not available in sufficient quantities. In other instances, the Government will find it advisable to assume the entire responsibility. Clearly, so long as the problem of building essential basic facilities in underdeveloped areas remains so important, we must continue to be concerned with the problems of public financing.

Mr. Chairman, we shall later in our discussions be considering various specific ways and means of assisting the economic development of underdeveloped countries. At this time, I should like only to touch upon some general aspects of the problem without going into those matters with which we shall be dealing in detail later on.

It has often been argued that the financial needs of economic development have outrun the capital available to underdeveloped countries; that the lack of funds is, if not the most important, one of the important limits on the rate of economic development. I do not intend at this time to analyze the accuracy of this generalization. Later in our deliberations, I hope to have an opportunity to discuss the prospects for the international flow of capital if appropriate opportunities are available. But I would, in this connection, like to quote from a statement made by the Governor from Cuba at the meeting of the Board of Governors of the International Bank in Washington last month. The Governor from Cuba said:

> **I can say without hesitation that there is more money ready to be lent by the Bank than there are projects ready to receive loans from the Bank. Our main difficulty has been not the question of raising sufficient money for financing development projects but the problem of having countries submit for our consideration good, worthwhile, bankable projects. The Bank is fully aware of this bottleneck, and tries to help in every possible way the less developed countries to get proper technical and financial assistance for the preparation and presentation of good projects. But I can say that no project has failed to obtain from the Bank the necessary financial assistance for lack of funds.**

Expanding Activities of International Bank

The Annual Report of the International Bank issued just a few weeks ago tells an encouraging story of expanding bank activity which is reflected in the economic and social growth of its member countries. During the fiscal year ending June 30, 1954, the bank made 26 loans, equivalent to about $325 million. These were more loans, and a greater amount of lending, than in any previous year of the bank's existence. Moreover, thus far in the present fiscal year, the rate of lending has kept pace with this new record, and the total of loans made by the bank has now passed the $2 billion mark, with almost three-quarters of the last billion going to underdeveloped areas.

These loans have been made to 34 member countries.

There is another development which, I think, has significant implications for the future financing of economic development. In the years following the war, the demands of reconstruction and investment at home prevented Western Europe from playing its traditional role as an exporter of capital, except in very limited fashion. This situation, together with Western Europe's own need for assistance, was one of the important factors hampering the growth of the world economy in the postwar years.

There are signs that this condition is rapidly changing. For example, between June 1953 and June 1954, Western European currencies to the equivalent of some $110 million became available in one form or another for lending by the International Bank.

In fact, what might be called the greater internationalization of the financial resources available to assist in economic development is becoming quite evident. During the past fiscal year, lendable funds available to the International Bank increased by $310 million. Of this amount, almost $190 million, or 61 percent, came from sources outside the United States. The last bond issue of the International Bank of $50 million was oversubscribed by $28 million and had to be allocated among bidders from 23 countries. For the first time in the history of the financial world, a dollar issue has been sold entirely outside the United States. This is indeed a hopeful augury for international financing of economic development.

The contribution of the International Bank to the financing of the economic development of underdeveloped countries, substantial though it may be, is but a part of the story of the cooperative effort of the free world in this direction. We shall undoubtedly be hearing from the representatives of other countries about the contributions they have found it possible to make to assist the underdeveloped areas. The efforts and contributions of my own country have often been indicated in this and other forums of the United Nations.

For this fiscal year, the Congress has authorized $300 million for economic assistance to underdeveloped countries. This amount will raise the total of assistance extended to the underdeveloped areas by the American people since World War II to about $6½ billion.

During the deliberations of this Committee last year there was some speculation as to the future role of the Export-Import Bank in the field of economic development. In this connection, I should like to recall one of the statements contained in the message of President Eisenhower to the Congress on March 30, 1954.[3] In this message the President, referring to the Export-Import Bank, stated that the bank will consider on their merits applications for development projects which are not being made by the International Bank and which meet the usual requirements of export-import lending. I think the statement indicates that the Export-Import Bank will be in a position to continue to play an active role in the development field. In this connection, some of you may be aware that the Congress recently authorized an increase of half a billion dollars in the lending authority of the bank. This action raised the bank's total lending authority to $5 billion. This same legislation also provided for a reorganization of the bank designed to make it a more effective operating instrument.

Agricultural Trade Act

I should like to mention one other way in which the United States can now help provide additional assistance for economic development.

Underdeveloped countries wishing to carry out ambitious development projects are often faced with the problem of providing at the same time an increased supply of consumer goods to their populations. Unless they can do so, inflation may well result, with all its pernicious effects on the very process of economic development itself. To illustrate, some countries in South and Southeast Asia, where the problem of surplus labor is acute, have been deterred from expanding their investment programs and putting this labor to work because they were not able to provide additional amounts of consumer goods.

In general, the International Bank and our own Export-Import Bank have been prepared only to finance the cost of imported capital goods and industrial supplies. They have not, as a rule, been prepared to provide long-term loans for imports of consumer goods.

As many of you are aware, our Congress has recently enacted the Agricultural Trade and De-

[3] *Ibid.*, Apr. 19, 1954, p. 602.

velopment Act. The purpose of this act is to enable the Government to use our agricultural commodities to expand world trade. We believe that one of the truly constructive purposes for which our surplus commodities can now be used is to help to promote economic development. We are prepared to make these commodities available to underdeveloped countries to help meet increased consumption demands arising from their development programs. I should like to take a moment to indicate how this can be done.

Under the provisions of the law, the United States Government is now authorized to sell its stocks of agricultural commodities for the local currency of the recipient country. Furthermore, the U.S. Government is authorized to lend back to the buying country a substantial part of all such local currency received. In other words, underdeveloped countries can now secure assistance in importing increased supplies of such consumer goods as wheat, corn, cotton, fats, and oils, which they may need to procure to meet the increased demands for consumer goods arising from accelerated development operation.

Such transactions envisaged in the Agricultural Trade and Development Act can be mutually beneficial. Since development programs may be expected to lead to increased consumption, holdings of agricultural commodities now overhanging the market can be moved without disrupting normal markets or depressing world prices. Countries which, in other respects, are in a position to undertake new development projects and to put unemployed labor into productive employment can do so without suffering the ill effects of inflation. Labor-using projects that may have been postponed because they could not easily be financed can be given the priority they deserve.

This new authority which the Congress has given us will run for a 3-year period. It is our hope that underdeveloped countries will take advantage of this legislation to accelerate their economic development.

Mr. Chairman, I think most of us would agree that the world has made important strides since the war in dealing with the problem of economic development. At the same time we are all, I am sure, acutely aware of the immense task still to be done. We cannot be content merely to look backward. It seems to me as a business executive, just as a manufacturer of automobiles is constantly trying to improve his already tried and tested models, so must we endeavor to make more effective our existing institutions and our existing methods of dealing with this problem. On the other hand, just as the automobile manufacturer is also constantly searching for basically new designs, so must we be alert to new ways and means which have practical applications for the future.

The peoples of the underdeveloped countries are eager for additional tools for economic growth. The compelling economic reasons for assisting these peoples to convert their aspirations into reality have often been analyzed, and I need not go into them at this time. But economic development has a larger significance. It is something which is good in itself because it affects people, their dignity, and their freedom. Economic development can mean the difference between explosive tensions and stability, between apathy and hope, between serfdom and constructive citizenship. It can contribute to the development of a stable, democratic society of free men.

These are powerful reasons for continued efforts by all of us to hasten the economic development of the underdeveloped countries.

U.S. Delegations to International Meetings

Pan American Sanitary Conference and WHO Regional Committee Meeting

The Department of State announced on October 6 (press release 559) that the U.S. Government would be represented at the Fourteenth Pan American Sanitary Conference and the Sixth Meeting of the Regional Committee of the World Health Organization at Santiago, Chile, October 8–22, 1954, by the following delegation:

Delegates

W. Palmer Dearing, M.D., *Chairman*, Deputy Surgeon General, Public Health Service, Department of Health, Education and Welfare

Frederick J. Brady, M.D., International Health Representative, Public Health Service, Department of Health, Education and Welfare

Howard B. Calderwood, Bureau of International Organization Affairs, Department of State

Advisers

Roy Anduze, M.D., Commissioner of Health, Virgin Islands Department of Health, Charlotte Amalie, Virgin Islands

William Belton, Bureau of Inter-American Affairs, Department of State

E. Ross Jenney, M.D., Chief of Health, Welfare and Housing Field Party, Foreign Operations Administration, Santiago, Chile

Juan A. Pons, M.D., Secretary of Health, Puerto Rico Department of Health, San Juan, Puerto Rico

Walter W. Sohl, Jr., *Secretary of Delegation*, Bureau of International Organization Affairs, Department of State

The Pan American Sanitary Conference is the supreme governing body of the Pan American Sanitary Organization (PASO), the international coordinating authority for public health in the Americas, and serves as the Regional Committee for the Americas of the World Health Organization. The Conference, which meets once in 4 years, delegates its powers to the Directing Council, which meets yearly during the 3 years between Conferences. The Thirteenth Pan American Sanitary Conference was held at Ciudad Trujillo, Dominican Republic, October 2–10, 1950.

The Fourteenth Conference will plan the course of the Pan American Sanitary Organization for the next 4 years. Among the agenda items are the following: (1) The Director's reports—i. e. annual report, reviewing the Bureau's activities in 1953; and a 4-year report, from the beginning of 1950, for consideration of the Conference; (2) 1955 program and budget; (3) malaria eradication; (4) health reports of governments; (5) election of the Director of the Pan American Sanitary Bureau for a 4-year term beginning February 1, 1955, and submission of his name to the World Health Organization in Geneva for confirmation as WHO Regional Director; and (6) Executive Committee nominations to fill vacancies on the 7-member Executive Committee, caused by the termination of the periods of office of Ecuador and Mexico. There will also be a series of technical discussions in the form of seminars held concurrently with the Conference Session. The subjects chosen this year are (1) methods of improving the reliability of raw statistical data required for health programs; (2) control of infant diarrheas in the light of recent scientific progress; and (3) application of health-education methods in rural areas in Latin America.

TREATY INFORMATION

Current Actions

MULTILATERAL

International Rice Commission

Amended Constitution of the International Rice Commission and Rules of Procedure. Approved by the Seventh Session of the FAO Conference at Rome, December 10, 1953. Entered into force December 10, 1953.

Members of the Commission:

United States	Italy
Australia	Japan
Burma	Korea
Cambodia	Laos
Ceylon	Mexico
Cuba	Netherlands
Dominican Republic	Pakistan
Ecuador	Paraguay
Egypt	Philippines
France	Thailand
India	United Kingdom
Indonesia	Viet-Nam

BILATERAL

Costa Rica

Agreement for a cooperative project in agricultural research in Costa Rica, pursuant to the general agreement for technical cooperation of January 11, 1951 (TIAS 2186). Effected by exchange of notes at San José June 28 and 30, 1954. Entered into force June 30, 1954.

Guatemala

Agreement providing for transfer of military equipment and materiel to the Government of Guatemala, subject to certain understandings. Signed at Guatemala July 27 and 30, 1954. Entered into force July 30, 1954.

Honduras

Agreement relating to duty-free entry and defrayment of inland transportation charges on relief supplies and packages. Effected by exchange of notes at Tegucigalpa August 26 and September 17, 1954. Entered into force September 17, 1954.

Liberia

Agreement relating to duty-free entry and defrayment of inland transportation charges on relief supplies and packages. Effected by exchange of notes at Monrovia May 6, August 23, and September 15, 1954. Entered into force September 15, 1954.

Thailand

Agreement relating to investment guaranties. Effected by exchange of notes at Washington August 27 and September 1, 1954. Entered into force September 1, 1954.

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Releases may be obtained from the News Division, Department of State, Washington 25, D. C.

Press releases issued prior to October 11 which appear in this issue of the BULLETIN are Nos. 559 of October 6, 561 of October 7, and 563 of October 8.

No.	Date	Subject
565	10/11	Dreier: Columbus Day.
*567	10/11	Educational exchange.
†568	10/11	Foreign Service memorial.
569	10/11	Robertson visits Formosa.
*570	10/12	Program for Mohammed Ali visit.
*571	10/12	Educational exchange.
*572	10/12	Educational exchange.
†573	10/12	German dollar-bond debts.
*574	10/13	Program for Tubman visit.
†575	10/13	Waugh: Colombo plan.
†576	10/14	Aldrich: N.Y. Board of Trade.
†577	10/14	Baldwin: Asian economic development.
578	10/14	Hoover: Greeting to Mohammed Ali.
†579	10/15	Phillips designation (rewrite).
*580	10/16	Department honors ceremony.

*Not printed.
†Held for a later issue of the BULLETIN.

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